

NOT TO BE TAKEN FROM LIBRARY

WITHOUT PERMISSION.

ISSUED EVERY WEDNESDAY



DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

D. O. HAYNES & Co. Publishers No. 3 PARK PLACE NEW YORK U. S. A.

SUBSCRIPTION:—U. S., CUBA AND MEXICO, \$4.00; CANADA, \$4.50; FOREIGN, \$5.00 A YEAR IN ADVANCE

VOL. V

NEW YORK, SEPTEMBER 25, 1918

No. 3

OIL ALMONDS BITTER

(S. P. A.)

Manufactured at our works in California.

W. J. BUSH & CO., Inc.

100 WILLIAM ST.,

NEW YORK

Oil Citronella (Native and Java)

Oil Amber (Crude and Rectified)

Oil Anise—Oil Cassia

MAGNUS, MABEE & REYNARD, Inc.

Essential Oils, Drugs and Chemicals

257 Pearl Street, New York City

H. A. METZ & CO., Inc.

122 Hudson Street NEW YORK, N. Y.

Dyestuffs, Colors, Sizing and Finishing Materials

Produced by

Consolidated Color & Chemical Co., Newark, N. J.

Dyestuffs and Intermediates

Produced by

Central Dyestuff & Chemical Co., Newark, N. J.

ESTABLISHED 1884

ROCKHILL & VIETOR

COMMISSION MERCHANTS

Chicago

SELLING AGENTS

New York.

Menthol Crystals

Chamomile Flowers

Refined Camphor

Essential Oils

Japanese Open

Insect Flowers

CHEMICALS

DRUGS

OILS

Chas. F. Garrigues Company

80 MAIDEN LANE, N. Y.

Barium Binoxide

82-86-90%

Caustic Potash

First Sorts, 88-92% U. S. P.

Gum Arabic

Oil Mustard Art, U.S.P.

Stearate of Zinc, U. S. P.

INDUSTRIAL CHEMICALS

BOTANICAL DRUGS

Lead Nitrate

White Crystals

Lead Nitrate

Broken Technical

Acetate of Soda

Broken Lumps

ANILINE DYES AND CHEMICALS, Inc.

Cedar and Washington Sts.,

New York City

We offer for prompt or future shipment

Paradichlorbenzol

Orthodichlorbenzol

Paranitrochlorbenzol

Orthonitrochlorbenzol

Dinitrochlorbenzol

Acetylsalicylic Acid

Acetophenetidin

(Aspirin)

(Phenacetin)

Phenolphthalein

Glycerophosphates

Monsanto Chemical Works

ST. LOUIS

Own and operate

NEW YORK BRANCH

COMMERCIAL ACID CO.

PLATT and PEARL STS.

EAST ST. LOUIS PLANT

Phosphate of Soda, Phosphoric Acid Paste P₂O₅

EDWARD P. MEEKER, Manufacturers' Agent, 68 Maiden Lane, New York

Phone John 6346

Refined Coal-Tar Products

Benzol, Pure	Crude Carbolic Acid, 10-15% 2nd Quality
Benzol, 100%	Dip Oil
Benzol, 90%	Phenol, U.S.P., Natural
Benzol, 50%	Phenol, U.S.P., Synthetic
Benzol, Straw Color	Para-Amidophenol
Toluol, Pure	Cresol, U.S.P.
Toluol, Commercial	Refined Cresylic Acid, No. 5
Toluol, Straw Color	Ortho-Cresol
Xylool, Pure	Meta-Para-Cresol
Xylool, Commercial	Xylenols
Solvent Naphtha	Resorcin, Technical
Crude Solvent Naphtha	Resorcinol, U.S.P.
Hi-Flash Naphtha	Naphthalin, Flake
Crude Heavy Solvent Naphtha	Naphthalin, Small Balls
No. 10 Naphtha	Naphthalin, Large Balls
Heavy Naphtha	Naphthalin, Crushed
Pyridin, Denaturing	Naphthalin, Powdered
Pyridin, Commercial	Naphthalin, Granulated
Paracumaron Resin	Naphthalin, Rice
Heavy Solvent Oil	Naphthalin, Lump
Shingle Stain Oil	Naphthalin, One-ounce Cakes
Special Heavy Oil	Naphthalin, Square Tablets
Special Heavy Oil, Grade 2	Naphthalin, Round Tablets
Neutral Hydrocarbon Oil	Cryst Alba
Creosote Oil	Nitronaphthalin
Crude Carbolic Acid, 97-99% Straw Color	Alpha-Naphthylamin
Crude Carbolic Acid, 95% Dark	Anthracin 80%
Crude Carbolic Acid, 50% 1st Quality	Carbazol
Crude Carbolic Acid, 25% 1st Quality	Phenanthrin
Crude Carbolic Acid, 15% 1st Quality	Special Cresol Compound
Crude Carbolic Acid, 50-60% 2nd Quality	Disinfectants, Coefficients 2 to 16
Crude Carbolic Acid, 25-30% 2nd Quality	Phthalic Acid Anhydride

We invite inquiries for the various products listed above, but would call attention to the fact that on some of these items present heavy contract obligations make immediate offerings impossible.

Assures Quality

and Service



The *Barrett* Company

Chemical Department

17 Battery Place



New York, N. Y.

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

VOL. V

NEW YORK, SEPTEMBER 25, 1918

No. 3

Entered as second-class matter, Dec. 7, 1914 at the Post Office at New York, N. Y., under the Act of March 3, 1879.

DRUG & CHEMICAL MARKETS

PUBLISHED EVERY WEDNESDAY

D. O. HAYNES & Co., Publishers, . New York
Publication Office: No. 3 Park Place.

Telephone, 7646 Barclay - Cable Address, "Era, New York."
CHICAGO OFFICE—123 W. Madison St.—Phone, Central 6941

SUBSCRIPTION RATES

United States, Cuba and Mexico.....\$4.00 a year
Canada \$4.50 and Foreign \$5.00 a year.
Single Copies, 10 cents

ALL SUBSCRIPTIONS PAYABLE IN ADVANCE

REMIT by P. O. or Express Order or New York Draft payable to order of D. O. Haynes & Co. Add 10 cents for collection charges if you send local check.

Published at No. 3 Park Place, Borough of Manhattan, New York, by D. O. Haynes & Co., a corporation; President and treasurer, D. O. Haynes; vice-president, E. P. Kennedy; secretary, D. O. Haynes, Jr. Address of Officers is No. 3 Park Place, New York.



A BINDER FOR THIS JOURNAL

Save Your Copies

Price 75c. net Cash, postpaid.

Table of Contents

EDITORIALS—

The Value of the Exposition.....
The Call for the Chemist.....
What Your Liberty Bond Signifies.....

FEATURE TRADE ARTICLES—

New Feature at Chemical Exposition.....

TRADE NEWS—

Arranging British Dye Merger.....
N. A. R. D. Meets in New Orleans.....
Potash Production in Canada.....
World Prices Advanced in 1918.....
All Chemical Glass Now Made Here.....

MARKET REPORTS—

Drugs and Chemicals.....14-15
Heavy Chemicals16-17
Colors and Dyestuffs.....18-19
Foreign Markets20

PRICES CURRENT22-28

IMPORTS AND EXPORTS.....21

Value of the Exposition

The educational features of the Chemical Exposition are far more instructive than text books, Government reports, or even a university summer course. Recent progress in the chemical industry, in the manufacture of colors and medicinal chemicals and pharmaceutical preparations is here shown, practically, by exhibits of the products now made in the United States. By means of a special label the management has designated the materials which are new,—only recently manufactured in this country. Lectures by leading chemists enable the layman to understand what the development of the last three years signifies in the commercial world, and moving pictures illustrate the methods of manufacture.

It would require years of study and travel for a student to learn as much as it is possible for him to acquire in one week by an intelligent use of the opportunities presented at the Exposition. The whole field is covered by representative exhibits of the dyes, chemicals and related products and the machinery used in their making. Many companies have gone to great expense to assemble the crude materials and finished products required in manufacturing their goods and one sees in crystallized form the operations of vast works which it has taken years to build.

3 Faith in the future of these industries is shown by the investment of nearly \$400,000,000 in new enterprises since August, 1914, when the United States was cut off from its sources of supply for many raw materials and manufactured products consumed in large quantities in this country. The production of chemicals and colors since then has been stupendous. Manufacturers have met the Government's requirements for war purposes and an enormous export demand from countries which had also been dependent upon European supplies, in addition to an increased domestic consumption.

9 The Exposition serves also to draw attention to the necessity for maintaining the technical schools in order to meet the demand for chemists. The Government has not lost sight of this important 10 fact and has taken over many large institutions 11 and provided free courses for those who show an 12 inclination to join the reserve forces that must 13 supply chemicals for munitions and other war 14 purposes. The exhibits will be of special interest 15 to students and may induce many to take up the 16 study of chemistry and chemical engineering in 17 which there are great possibilities.

The Call for the Chemist

A score of leading chemists, engaged in research work, plant management, analytical work and in teaching chemistry and chemical engineering, have contributed their views on the situation in this country and the solution of the problems which the manufacturers are facing in the matter of competent help in the laboratory and other departments now that the Government is taking the most available men for war work. The symposium will form a series of articles in DRUG AND CHEMICAL MARKETS during October, beginning on the second of the month and possibly running into November.

Among the contributors are Henry Wigglesworth, director of research, General Chemical Company; Prof. B. F. Lovelace, Johns Hopkins University; Dr. F. Zimmerli, head chemist, The Pfaudler Company; Provost Edgar F. Smith, University of Pennsylvania; Dr. L. C. Jones, director of manufacturing, National Aniline and Chemical Company; Prof. W. Richards, Lehigh University; Dr. D. W. Jayne, manager chemical department, The Barrett Company; Dr. D. Basil Alexander, Barber Asphalt Paving Company; Dr. Edward Hart, president Hart Chemical Company; Dr. Abraham Henwood, chief chemist, Hercules Powder Company.

Every phase of the situation is discussed from the question of the studies to fit the student for his life work, to the duties of the laboratory worker, the research chemist, the analytical worker and the chemical engineer. The question whether the chemist should assume the duties of superintendent or attempt to combine his scientific work and the duties of chemical engineer, if capable, brings out diametrically opposite views from manufacturers and educators who stand at the head of the profession. The articles are fascinating reading for the student, the instructor, the chemist, and the manufacturer.

What Your Liberty Bond Signifies

The Fourth Liberty Loan is almost here. People are being asked to lend their money to the Government. On payment of a certain sum they receive a stamped paper, or perhaps a coupon book for the partial payment plan. These slips of paper signify far more than the average bond purchaser realizes. There is a way by which his sacrifice can be visualized to him, a way to let him know that his money pays for something tangible, and does not vanish into the hopper of the war-mill apparently unrecorded.

The man who buys one \$50 Liberty Bond can be shown 1,000 rifle cartridges, or 100 hand grenades, or 10 bayonets and scabbards that his money pays for, or the many other things that a Liberty Bond of that denomination will buy. Show a man who buys a \$100 Liberty Bond the three rifles and their bayonets for which he is paying or five incendiary airplane bombs, and he will realize what his part will be in the war. Then when he goes home he can say: "Well, today I bought eight shells for a 75 mm. gun for the Government. That ought to hand something to the Hun!" or

"Let's hope that the 25 pounds of ether my \$100 Liberty Bond bought will come in handy at the operating-table in France!" It brings home to him the real meaning of the Fourth Liberty Loan.

Somebody who is keen on statistics has figured out that with the \$29,614,850 raised in the Third Liberty Loan by the chemicals and drugs trades, the authorities at Washington were enabled to construct one dreadnaught and have enough left over to pay for the manufacture of 51,466 automatic rifles.

BOOKS OF TRADE INTEREST

THE MOTOR TRUCK AS AN AID TO BUSINESS PROFITS, By S. V. Norton. Illustrated, 500 pages, cloth. A. W. Shaw Company, Chicago, New York, and London.

There are 335 illustrations in this book showing the essential features of motor trucks and their adaptability for various lines of business. The author demonstrates how leading companies have increased their profits by using trucks. Mr. Norton has been associated with the motor truck industry from the start and has made a study of the problems of motor truck owners. Much of the experience embodied in the book was obtained from business men who operated only one truck and serves to answer the question whether any business is too small to require a truck.

In the thirty-two chapters of the book the author discusses every phase of the industry from the time to change to motor delivery to increasing profits by cutting delivery costs. The business man who has not used a truck will be astonished by the number of suggestions for enlarging his business. The managers of large companies will find in the book the experiences of other owners which will broaden the use of his own trucks.

And the Fourth Liberty Loan!



CLOWN PRINCE: "BUT FATHER, AREN'T YOU PLEASED WITH OUR SHOWING AGAINST THE HOSPITAL SHIPS?" KAISER: "ACH, MY SON—ONLY TEN! THE U-BOATS SHOULD HAVE SUNK AT LEAST A SCORE!"

New Features at Chemical Exposition

Progress of the Industry Illustrated by Unique Exhibits of Leading Companies

THE development of the chemical and dyestuff industries since the war is crystallized in small compass in the Chemical Exposition, Grand Central Palace, and the exhibits illustrate the progress, step by step, so clearly, that the layman can readily understand what the chemists have accomplished. In considering the demands upon the industry a number of important and unusual conditions must be taken into consideration:

First—The curtailment of German dyes that were finding an excellent market in this country.

Second—The large export demand for a number of chemicals that were being made in this country.

Third—The heavy demands from the American Government, as war preparations progressed.

The demand for chemicals and dyestuffs has become so great that the aggregate capital of new incorporations since the outbreak of the war in 1914 now stands at \$387,000,000. For purposes of comparison it is interesting to note the rapid and steady growth from year to year as given in the following figures since the start of the war:

Five months 1914.....	\$16,838,000
Year 1915	65,565,000
Year 1916	90,244,000
Year 1917	146,160,000
Eight months, 1918	59,164,000
Total.....	\$386,971,000

Capital Shows No Timidity

New incorporations of companies for the manufacture of chemicals, drugs, dyes, etc., during the war period, compiled by months, were as follows:

1914—	1914—		
August	\$1,900,000	November	\$3,400,000
September	3,800,000	December	6,200,000
October	1,538,000		
Total		\$16,838,000	
1915—	1915—		
January	\$1,630,000	July	\$4,950,000
February	750,000	August	3,260,000
March	1,925,000	September	800,000
April	1,400,000	October	25,525,000
May	5,100,000	November	1,650,000
June	8,450,000	December	10,125,000
Total		\$65,565,000	
1916—	1916—		
January	\$9,525,000	July	\$30,000
February	37,915,000	August	1,375,000
March	1,450,000	September	5,500,000
April	2,575,000	October	25,805,000
May	6,800,000	November	6,440,000
June	553,000	December	976,000
Total		\$99,244,000	
1917—	1917—		
January	\$3,550,000	July	\$10,215,000
February	3,900,000	August	13,101,000
March	11,850,000	September	12,925,000
April	5,095,000	October	6,022,000
May	16,375,000	November	54,777,000
June	1,775,000	December	6,575,000
Total		\$146,160,000	
1918—	1918—		
January	\$11,125,000	May	\$1,200,000
February	21,250,000	June	1,435,000
March	13,635,000	July	3,360,000
April	3,980,000	August	3,175,000
Total		\$58,264,000	
Grand total		\$386,971,000	

The majority of coal-tar crudes and intermediates on the market today were not produced in any large quan-

tities in this country prior to the war. A great industry has been built up, but even with plants now working over-time to take care of the large demands, the daily output is hardly sufficient to take care of the needs of the Government and the outside call. The Government has found it necessary to supervise the output of toluol and fix prices where releases are made. This was done because of the high prices asked in the open market and also because authorities at Washington needed large quantities for their own use. Practically the same conditions are true of the majority of heavy chemicals. Besides the increasing needs of this Government and our Allies, the export call from South American countries has been an important factor. The War Trade Board has found it necessary to take control of all heavy acids and caustic soda, on account of the foreign demand.

Field of Natural Dyes

Prior to the war natural dyestuffs provided possibly ten per cent of the color requirements of our manufacturers, the chief items of utility being logwood, hematine and fustic. It has been computed by reliable authorities that natural dyestuffs will stand in the proportion of about 30 per cent of the whole color requirements, leaving about 70 per cent to be supplied by the artificial dyes. Chemists and dyers have devoted themselves during the past two or three years to the development of new methods of using natural dyestuffs, the discovery of new mordants and new methods of combining mordants, as well as in the perfecting of new sources of color. In the dyeing of the various fibres, and especially in the dyeing and weighting of silk, and the dyeing of leather, natural dyestuffs occupy a field of usefulness all their own.

For many years before the war the dyeing of khaki for military uses, for Boy Scouts cloths and for sport goods, was effected almost exclusively by the use of artificial dyestuffs. Direct colors, sulphur colors and vat colors were employed to meet the various requirements as regards fastness to light, soaping, acid and other tests. With the cutting off of foreign supplies of these dyes, and before similar colors of American manufacture became available, our manufacturers were forced to use natural dyestuffs, with indifferent results. But the problem has now been solved, and today our boys in the Army are unknowingly thankful for softer, heavier and warmer cloth, dyed with natural dyestuffs, than would be the case with the same cloth dyed with direct or sulphur colors. Never before has there been such a strong demand for natural dyestuffs as is noted at the present time, and perhaps never before have prices been at the high levels now quoted. But the Government has found it necessary to step in and regulate the importations of these materials in order that steamer space may be reserved for more important products.

Shortage of Intermediates

Although remarkable progress has been made in the American dyestuffs industry since the war it is stated by those who are in a position to know that for the past year promises of 1916 and 1917 have not been altogether fulfilled, on account of a shortage in crudes and intermediates. Despite this fact, however, there are a number of American-made colors that are said to be just as good as those formerly obtained from Germany.

There are still a number of important colors that are not yet made on this side of the water, such as indanthrene and vat colors for cotton, giving the fast gingham and shirting shades, although it is said that these colors are now in the experimental state. Other colors that are desired in large quantities by the textile trades are some of the brilliant acid colors, violets, blues and greens, indispensable in the production of some of the made shades on high grade worsteds, woolens, and silks.

Production of Coal-Tar Chemicals

The production of finished coal-tar chemicals during 1917, exclusive of explosives and synthetic phenolic resins, was 54,550,107 pounds, valued at \$68,790,856, subdivided as follows: Forty-five million, nine hundred and seventy-seven thousand, two hundred and forty-six pounds of dyes valued at \$57,796,228; 5,092,558 pounds of color lakes, valued at \$2,764,064; 2,418,274 pounds of medicinal chemicals, valued at \$5,639,867; 779,416 pounds of flavors, valued at \$1,862,456; 263,068 pounds of photographic chemicals, valued at \$602,281; and 19,545 pounds of perfume materials, valued at \$125,961.

There were 81 establishments engaged in the manufacture of coal-tar dyes in 1917, and their production during that year was practically the same in quantity as the annual importation before the war. The imports for the fiscal year 1914 amounted to 45,840,866 pounds, and the production in the United States in 1917 was 45,977,246 pounds. An analysis of this total, however, reveals that the domestic production, though equal in quantity to the preceding imports, differs in the relative amounts of the various classes of dyes. Only a small production was reported for indigo and the alizarin and vat dyes derived from anthracene and carbazol—classes of dyes which include some of the best and fastest colors known to the textile trade. The United States produced only 2,166,887 pounds of these dyes in 1917; the elimination of 1,876,787 pounds of indigo extract, made from imported indigo, leaves only 290,100 pounds as the real output of these dyes. This is less than 3 per cent of the pre-war imports. Dyes of this class are dutiable at 30 per cent in the tariff act of 1916. The lack of development in the manufacture of these particular dyes promises to be remedied to a considerable extent in 1918. A number of firms have begun their manufacture and a large increase in production can clearly be foreseen.

In the classes of dyes which if imported would be dutiable at 30 per cent plus 5 cents a pound, the American manufacturers have made remarkable progress, the production being 43,810,359 pounds, at a total value of \$57,639,991. That this represents something of an excess over the American needs is evinced by the fact that during the fiscal year 1917 American-made dyes to the value of \$11,709,287 were exported to other countries. The exports thus exceeded the pre-war imports in total value, although not in tonnage nor in the variety of the dyes.

Demand for Medicinal Chemicals

The demand for medicinal chemicals has taxed the capacity of the pharmaceutical manufacturers. The chemists in the employ of the leading houses have been called upon to meet special conditions due to the war and the shortage of many drugs. Red Cross organizations of the Allies as well as the numerous units being sent to the front from this country have drawn heavily upon the supplies made here. The Army and Navy need vast quantities. Hospitals at the fighting centers must be supplied promptly with medicines of unquestionable quality. While the manufacturers have met this huge demand abroad at great sacrifice of time and labor, they have not neglected the home requirements. The public health has not suffered. By steadily increasing their facilities, adding new plants and enlarging their force of employees they have supplied the hospitals in the United States, the drug trade, the physicians, and the laboratories which need numerous reagents in their chemical work.

The pharmaceutical industry has developed quietly and without attracting the attention that has been drawn to the manufacture of heavy chemicals for munitions or for dyestuffs. Among the exhibits at the Exposition which are of especial interest to the drug trade, is one by a leading pharmaceutical house that makes a specialty of synthetic chemicals. In addition to the medicinal chemicals needed to maintain the health of the Army and Navy and to meet the requirements of those at home the manufacturers have included in their output the fine alkaloids, chloral hydrate, and a full line of iodides and bismuth salts. There are many new products shown in the exhibit of pharmaceutical chemicals, which were not made in this country before the war. When imports were cut off, it was found necessary to produce several standard remedies in this country. The Federal Trade Commission granted licenses under the Trading-with-the-Enemy act and manufacturers are now meeting the demand with virtually the same products that were made abroad.

Exhibits By Leading Companies

Among the exhibits which best illustrate the progress made in the several lines of chemicals, pharmaceuticals and dyestuffs are the following:

Merck & Co., Manufacturing Chemists—The exhibit of this house occupies the same booth as in previous years, No. 89, but the display includes many synthetic remedies not made in the United States before the war. Many of these are now made at the plant at Rahway, N. J., which was established eighteen years ago and has been greatly enlarged since the war to meet the increasing demand for medicinal chemicals for the Army and Navy, the war hospitals, and the laboratories in this country needing reagents in the vast chemical experiments being conducted under Government supervision. Among the products attracting special attention are carbolic acid, salicylates, hydroquinone, aniline, nitrobenzene, acetanilid, acetphenetidin, resorcin, paranitroaniline, phenolsulphonates, beta-naphthol compounds, and paraphenylenediamine.

Union Dye and Chemical Corporation—Booth 456, which is occupied by this company, formerly known in the trade as the Federal Dyestuff and Chemical Company and recently reorganized, is of particular interest to the textile trade. The exhibit of dyes, intermediates, and heavy chemicals is supplemented with samples of cloth dyed with the colors made by the company at the extensive plant at Kingsport, Tenn. Among the products manufactured under the new management are dinitrophenol, dinitrobenzol, dinitrochlorbenzol, dinitrotoluol, beta naphthol, monochlorbenzol and similar products. The company also produces caustic soda in 60 per cent, 62 per cent, 74 per cent and 76 per cent Liverpool test; muriatic acid, 18 degree and 20 degree Baume, with a daily capacity of 40,000 pounds.

Chemical Company of America—A khaki color is a feature of the exhibit of this company which has a very extensive list of intermediates on view in booths 279, 280, 281, 282. The exhibit, which is in charge of C. Kendall and Mr. Christ of the New York offices, includes nitro benzol, aniline oil for red, benzidine sulphate, benzaldehyde, monoethylaniline, metaphenylenediamine, para-nitrotoluol, paranitroacetanilid, aniline oil, benzidine base, benzyl chloride, diethylaniline, metatoluylenediamine, mixed toluidine, paraphenylenediamine, paramidophenol base, and paramidophenol HCL.

New Jersey Zinc Co.'s Booth

New Jersey Zinc Co.—Samples of the products made at the company's works are shown in their application in a commercial way. Zinc oxides are accompanied by examples of the several different finishes that can be obtained by using zinc oxide paint and enamel. The metallic zinc is on view and beside it are the numerous articles

which can be made from the rolled, drawn and spun metal. The exhibit, which is in charge of W. H. Hendricks, occupies booths 403, 404, 405, and 406.

Takamine Laboratory, Inc.—A few of the specialties of this company are made prominent in the exhibit, especially those that appeal to the textile trade. There are three booths. In one is shown a product called "Polyzime." It is used extensively as a desizing agent in the manufacture of textile goods and is said to have great diastatic power. Mr. Tanner and Mr. Newell of the Charles S. Tanner Company, Providence, R. I., selling agents for the textile trade, are to remain at the Exposition throughout the week in order to meet members of the mill trade who visit the Takamine booths. Samples of cloth finished with "Polyzime" are shown. There is an attractive exhibit of the chemicals which the Takamine company is importing from Japan. The company has a factory at Clifton, N. J., where arsaminol and neo-arsaminol are manufactured. These products are shown in one of the booths under the direction of C. C. Concannon. Dr. Jokichi Takamine, president of the company who recently returned from a six-months' visit to the Orient, E. T. Takamine, treasurer, and Mr. Suzuki, manager of the Tokio office of the company, make daily visits to the Exposition and are studying the exhibits with great interest.

A. Klipstein & Company—Chemicals and colors of American make and Swiss colors are shown side by side at the booths of this company. E. H. Klipstein is in charge of the exhibit which includes tanning materials, gums, oils and finishers. The textile trade is taking great interest in samples of anilines and other dyes which are specialties of this house.

Charles F. Garrigues Company—The booths occupied by this company are directly opposite the elevators on the third floor, Nos. 548 and 549, with frontage on three aisles. There is a special exhibit of caustic potash, stearite of zinc, and sulphur dioxide. The display of chemicals which the company handles is attracting much attention. In an adjoining booth is the display of the Virginia Smelting Company, of which the Charles F. Garrigues Company is the sole selling agent. The name of the company and of the Virginia Smelting Company appear above the booths. Otto F. Andersson and other representatives of the two companies are in attendance to describe the uses of the various products.

Marden, Orth & Hastings Corporation—The products of this company are displayed in booth 26—the same booth they have occupied at all the preceding Expositions. Their exhibit includes a full line of the dyestuffs and intermediates manufactured in their various plants, samples of their heavy chemicals and also of their special brands of animal, vegetable, oriental and fish oils. As many of the products were first developed in America by Marden, Orth & Hastings—some during the past year—the booth is constantly crowded by members of the trade.

Exhibit of The Barrett Company

The Barrett Company—The Chemical Department of The Barrett Company has an exhibit of an educational character which appeals to the general public as well as to chemists. It is shown in booth 24. The illuminated coal tar chart with samples of products obtained by the destructive distillation of coal attracted so much attention last year that it is again the chief feature of the display.

Refined coal tar products which enter into the dyestuff and pharmaceutical fields as crude materials, are shown by means of attractive cards, connected by ribbons to jars containing samples which show the steps through which these crude chemicals pass to reach the finished dyestuff or pharmaceutical product.

Many materials, members of the coal-tar family, are doing their bit at the front in the form of explosives. This feature of the industry is illustrated by The Barrett Company by means of a service flag of six stars. In each star is the name of an important product which enters into the manufacture of explosives. From these stars ribbons lead to placards on which are printed the names of the explosives.

There is a cabinet containing a few products which are made a specialty in the trade and most of which are the result of recent development by The Barrett Company. Mr. H. G. Sidebottom, technical service manager, is in charge of the exhibit.

Frank Hemingway, Inc.—Three distinct displays are made by the Frank Hemingway company. The dyestuff exhibit is in charge of Thomas F. O'Keefe; the intermediate display is under the supervision of H. H. Foster; and the chemical section under Howard A. Armbruster. The features of the dyestuff exhibit are victoria blue, crystal violet, meta chrome brown, chrome brown, and chrome green. There are also shown the chief heavy chemicals, pharmaceuticals, and benzyl chloride, picramic acid, orthonitrophenol, paranitrophenol, metaphenylenediamine, paraphenylenediamine, phosgene, and salicylic acid.

New Dyes of National Aniline Co.

National Aniline and Chemical Co., Inc.—The greater part of the exhibit of the National Aniline and Chemical Co. is marked with the special label of the management of the Exposition indicating that the products so tagged were not made in the United States before the war. Among the most recent colors offered are alizarine sapphire and carbanthrene blue. Alizarine sapphire is the fastest known level acid dye to light for wool, and carbanthrene blue a vat dye of the greatest fastness to washing for cotton.

Alizarine sapphire because of this fastness will find extensive application on women's dress goods as a component color in such fashionable shades as taupe, bear, rodent, etc. These are the shades which have occasioned most of the complaints received by the department stores and other retailers, since the blue that was used in making these shades faded more rapidly than the other colors of the compounds. This dyestuff also is used extensively as a straight blue shade on all work that requires extreme fastness to light, notably flags.

Carbanthrene blue will not fade under even the most vigorous laundry methods. It is almost impossible to remove this color once it is properly applied. The importance attached to these two colors is shown by the fact that the National Aniline & Chemical Company has already spent several hundred thousands of dollars in research work and plant investment. The introduction of these types, together with indigo and alizarine and some twenty other fast colors already largely produced by this company, means that every reasonable demand for fast colors has been met. In 1919 these two products will be available in large quantities.

Aniline Dyes and Chemicals, Inc.—This company is the successor of Geisenheimer & Co., and is exhibiting the extensive line of products manufactured by the Ault & Wiborg Co., of Cincinnati, including dyestuffs, intermediates and numerous chemicals. Swiss dyes are also a specialty of the company. The display occupies four booths, Nos. 544, 545, 546, 547, and was arranged by W. H. Van Winckel, vice president.

The Pfaudler Co., Rochester, N. Y.—Glass enameled steel products, which are necessary in the manufacture of goods in the chemical, pharmaceutical and food industries, make an exhibit that is attracting much attention from members of the trade. The durability of the Pfaudler Company's wares is illustrated by a piece that

has been in actual service in boiling acid for one year. The utility of the glass enameled steel tanks from a sanitary point of view interested food manufacturers and canners.

Newport Chemical Works, Inc.—The exhibit of this company includes products from its plants at Carrollville, Wis., and Passaic, N. J., and consists of an extensive line of intermediates and dyestuffs—all developed since the outbreak of the war. Alpha naphthylamin, a very important intermediate, was first manufactured in this country by the Newport Chemical Works. The fact that this company carries out the whole process of manufacture from mining the coal to the recovery of the by-products and the manufacture of intermediates and dyes has made it possible for them to develop a line of products which have an enviable reputation for high quality.

H. A. Metz & Co., Inc.—In Booths 485-6-7-8 are displayed the products of four companies controlled by Col. H. A. Metz: Textileather Co.; Central Dyestuff & Chemical Co.; Consolidated Color & Chemical Co.; and H. A. Metz Laboratories, Inc. The Textileather Co. is displaying an extensive line of articles for various uses made from artificial leather. Dyestuffs for practically all purposes are included in the Central Dyestuff & Chemical Co. exhibit. In the booth of the Consolidated Color & Chemical Co. is a line of fast colors, in which the olive drabs are featured. Enormous quantities of the olive drabs are being supplied for Government work. Salvarsan, neosalvarsan, novocain and anaesthesia are the finished medicinal chemicals displayed by the H. A. Metz Laboratories, Inc., together with some of the intermediates showing the steps necessary in the manufacture of the medicinals.

Hercules Powder Company—The Hercules Powder Company features in its exhibit a line of chemicals obtained from kelp. The large display comprises samples of pyroxylin solutions, waterproof belt cement, lacquers, aeroplane dopes, potash fertilizer material, powder and dynamite. The harvesting of kelp and its manufacture are shown in motion pictures and slides with a lecture by Dr. C. A. Higgins, one of the representatives of the company. The company also exhibits a line of valerates which they are now making.

At the opening session of the Exposition, Dr. Charles H. Herty criticized the Alien Enemy Custodian's method of dealing with enemy-owned plants. In discussing the situation in regard to coal tar medicinals, Dr. Herty said:

"It has been amazing to note a persistent campaign of newspaper advertising seeking to convince our people that only tablets of aspirin stamped with a certain magic word give assurance of genuine acetyl salicylic acid. These tablets are made in the plant of an enemy owned corporation now controlled by the Alien Property Custodian.

"This material, no longer patented, sells to-day in large quantities and at a price greatly above that of the same substance manufactured by American firms, whose product has been shown by official tests to be of equal purity. The most amazing feature of this advertising campaign is that it is being carried on by American directors appointed by the Alien Property Custodian, and with the American directorship emphasized in the advertising matter, thereby beclouding the main issue of enemy ownership."

The Newbro Manufacturing Company, Atlanta, Ga., has filed articles of incorporation with a capital of \$15,000 to operate a plant for the manufacture of soaps, etc. Charles M. Newman is the principal incorporator.

The American Foundry Linseed Oil Company, 39 Frelinghuysen Avenue, Newark, N. J., has filed notice of organization to manufacture oils, chemicals, etc. James J. Patrick, 1 Brookwood Street, East Orange, heads the company.

TO TAKE EXPLOSIVES INVENTORY

ALBANY, Sept. 24.—Because of several reported thefts of dynamite from magazines belonging to contractors and other users of explosives, the Federal Bureau of Explosives and the Bureau of Explosives of the State Industrial Commission are tightening their supervision of users and storers of explosives. Under the Federal law recently enacted, all users of explosives must procure Federal licenses, usually from the County or Town Clerk in their locality; and manufacturers and dealers in explosives may not sell to those who are unable to produce these licenses. Possession of explosives by those who have no license is a serious offense under the Federal law and is punishable by prison sentence.

Information is in the hands of the Federal inspector of explosives, Edward D. Jackson of Buffalo, that there are many small holders of explosives who use dynamite in blasting stumps or for other domestic use, who have not declared such possession by taking out licenses. Armed with bills of purchase from the manufacturers and dealers, the Federal inspector and his assistants will shortly proceed to take inventory of all the explosives held in New York State.

Mr. Jackson calls attention to the fact that druggists who carry constituent ingredients of explosives must take out licenses and are not allowed to sell more than one ounce of such constituent ingredient to any one purchaser and a record must be kept of such sales. This is done so that if a mysterious explosion occurs in a given locality, the Government agents may be able to ascertain readily and speedily who in the vicinity has purchased explosives or their constituents.

REVENUE BILL PASSES HOUSE

With only slight changes from the original draft made by the Ways and Means Committee, the \$8,000,000,000 War Revenue Bill has been passed by the House and will go on to the Senate where it is expected that it will be materially changed with revisions raising the tax rates.

An amendment designed especially to stimulate potash production by extending to "timber and other natural deposits" the depletion allowances provided for mines and oil and gas wells was adopted. An amendment allowing a 10 per cent income deduction to oil operators and prospectors was also accepted.

I. GILES LEWIS DEAD

I. Giles Lewis, secretary of Robert Stevenson & Co., wholesale druggists, of Chicago, died at his home in that city on Sept. 19. He was 71 years of age. Mr. Lewis was born at Pharsalia, N. Y., and attended the University of Michigan from 1864 to 1867, holding a certificate of proficiency for chemical and pharmaceutical work in that institution, the honorary degree of Pharm. M. being conferred upon him in 1891. He became identified with the wholesale drug trade of Chicago many years ago, and for the past thirty-seven years was manager of the sundries department and secretary of Robert Stevenson & Co. The body was taken to Ann Arbor, Mich., for burial.

The most important matter brought to the attention of the Paint, Oil and Varnish Club of New York at their 162nd dinner on Thursday, September 19, was the need for having the paint industry placed upon the essential list by the Government. F. P. Cheesman and H. S. Chatfield were leaders in calling for immediate action, looking to proper representation.

Fire recently destroyed the three-story brick building of the Iridescent Dye Company at Coney Island, N. Y. The damage is estimated at \$10,000.

WAR WORK OF THE CHEMIST

According to a member of the Chemists Club of Paris, out of 2,500 chemists in France 1,400 have been mobilized. Of these 1,400,800 were subsequently employed in technical work, but the 600 others were sent to their regiments, meaning a grave loss in the personnel of the Government munition plants. The smallness of this number of French chemists may be judged from the fact that Germany has 30,000 chemists employed in the service of the Government and great industries. This army, the French authority points out, has enabled Germany to carry on her gas warfare and the manufacture of explosives. The progress of this mode of attack up to a certain point has undoubtedly been due to the temporary superiority that Germany has enjoyed in the number of her chemists.

The same French authority says in the "New York Sun", the United States will be called upon for additional efforts in this direction. We have 16,000 chemists, about half the number of German chemists, and this figure shows that a country of such magnitude is far from being well equipped with these workers. Chemists are required for the munition plants, textile and paper mills, and chemical works engaged in making sulphuric and nitric acid.

In the making of explosives alone Germany makes use of over 120,000 tons of sulphuric acid a month. When this supply fails, if only for a brief time, she will be compelled to sue for peace. For sulphuric acid is essential in making not only gun-cotton and smokeless powders but all the high bursting explosives used for torpedoes and shells. But it is not so much a great source of military power as a means of supporting that power with materials almost as essential as powder—with nitric acid, fertilizers, foodstuffs, dyes, and innumerable chemicals and articles of commerce. In the manufacture of these, two things are chiefly necessary, sulphur in some form and the skilled chemists to transform it into sulphuric acid and industrial materials.

DON'T WASTE PAPER



The War Industries Board has issued a warning that paper must not be wasted, saying:

"PAPER IS ESSENTIAL: It has been placed on the priority list only on the express condition that all wastes be eliminated and every economy be practiced. In doing this the Government will use its best efforts to provide sufficient paper for strictly needful purposes but nothing more. Every distributor, converter, or user of paper is hereby notified that the continuance of his supply is dependent entirely upon the strict observance of the rulings of the War Industries Board, one of which is that paper must not be wasted. Failure to comply with this requirement will lead to the withdrawal of any or all priority privileges, without which the supply cannot be maintained."

The Primos Chemical Company, Primos, Pa., is taking bids for the erection of a one-story addition to its plant, about 37x92 feet.

ARRANGING BRITISH DYES MERGER

Committee Appointed at Shareholders Meeting Continues Negotiations With Levinstein, Ltd., of Manchester—Opposing Directors Resign—The Merger Plan.

(*Special Correspondence to DRUG AND CHEMICAL MARKETS*)

LONDON, Sept. 14.—The shareholders of British Dyes, Ltd., who voted in favor of amalgamation with Levinstein, Ltd., of Manchester, appointed a committee to continue the negotiations with Messrs. Levinstein and arrange the details of an agreement, which will be submitted to another special meeting of shareholders.

James Falconer, chairman of the Board, on behalf of six out of the ten directors, offered a resolution that the scheme "be not approved" but on the vote this was defeated by 487,039 votes to 168,185.

Mr. Falconer and five other directors—Messrs. Kenneth Lee, H. W. Christie, Claud Hollins and George Garnett and Dr. M. O. Forster—then placed their resignations in the hands of the shareholders. The minority directors who remain on the board are G. P. Norton and J. Turner, and the two Government nominees, Sir Frank Forbes Adam and Sir Gilbert Claughton.

G. P. Norton, one of the minority of the board who are in favor of the amalgamation, said it was accepted by both sections of opinion that some form of amalgamation was necessary if England was to be free from German domination after the war, and that the financial provisions of the original scheme represented a fair and equitable bargain.

"The main issue," he said, "is that of control. It has been said that under the agreement 40 per cent of the voting power would be in the hands of Messrs. Levinstein's as a solid block. But Levinstein's is a firm with a considerable number of shareholders. Dr. Levinstein holds a quarter of the shares in his own company, which would represent only 10 per cent of the shares of the amalgamated companies.

"But the new company would have a greatly enlarged capital, and Dr. Levinstein's holding would be a very small fraction. Even under the chairman's proposals, what is to prevent Messrs. Levinstein buying all the shares in the British Dyes and thus controlling the two concerns? I am absolutely certain that Dr. Levinstein and his directors have not the slightest desire to obtain control of British Dyes. Safeguards have been secured from the Board of Trade to prevent any such thing happening.

"When, after the war, the import of dyes is to be restricted, a committee, consisting partly of dye-users and partly of dye manufacturers, will be given power to admit from abroad dyes not made here in sufficient quantities and sold at a reasonable price. Further, the Government takes the right to fix the price of any particular dye, and also to veto any transfer of shares. It is further proposed that there should be three directors appointed by the shareholders of each company and three by the Government so that it would always be possible for the State to stop any abuse. There need be no fear that industrial development will be neglected by the new company, for it is only through development and research that dividends could be earned."

Replying to a question, the chairman said the conditions as to the appointment of the directorate laid down by Dr. Levinstein (in a letter read at the last shareholders' meeting) had been withdrawn. The appointment is now left to the shareholders of the amalgamated companies.

N. A. R. D. MEETS IN NEW ORLEANS

Report of Executive Committee Urges Opposition to Consolidation of Pharmacy Boards With Any Other Department

New Orleans, Sept. 24.—The National Association of Retail Druggists listened to the reports of the executive officers during the opening business session of the twentieth annual convention on September 16. President W. H. Cousins recommended in his address that the Association co-operate with the Government during the war and go on record as making the successful prosecution of the war to victory the paramount purpose, both as individuals and as an association. President Cousins suggested that the Association look after the druggists of the South more closely with a view to building up the membership from the thickly populated sections. He urged the members to take greater interest in affairs at Washington, and to ask better recognition for pharmacy by the Government. He said they should turn their stores into political clubs and go into politics to protect their interests in national and state legislation.

Secretary Henry reported that the N. A. R. D. had gained 1236 members during the year.

The Executive Committee's report, presented by James F. Finneran chairman, recommended that the Association go on record in opposition to any proposal which seeks to consolidate our pharmacy boards with any other board, commission or department.

Walter Parker, Secretary of the New Orleans Association of Commerce, spoke in behalf of the Wholesale interests, and his advice was "To stick together and work without ceasing."

Professor Beals made a telling talk in behalf of the National Drug Clerk Conference. This conference consists of the six National Associations of the Allied interest—The N. A. R. D., the American Pharmaceutical Association, the National Wholesale Druggists Association, American Drug Manufacturers Association, Proprietary Association of America, and American Association of Pharmaceutical Chemists. The object of the conference is to unite the influence of the Allied organizations, for suitable legislative effort.

H. S. Noel of Indianapolis, Ind., spoke on Stabilizing Profits on Rising Costs. He said that five in one hundred are successful to the end of life; 4.3 per cent leave from \$300 to \$1,000; 1.5 per cent leave more than \$25,000; 1.8 per cent leave from \$5,000 to \$10,000, and 97 in 100 fail to leave more than \$1,000. The apparent discrepancy in totals is accounted for by the fact that many amass fortunes only to lose them. 99 per cent of the men over 65 are dependent. He said that war time business calls for a better understanding of underlying economic principles, and the development of the power of co-operation nationally. He said that "turn-over" should be estimated by inventory cost, rather than inventory selling price; that turnover is the secret of successful war time business; that the retail druggists must work to create a maximum of sales and profits on a minimum of investment. To this end he recommended curtailment of stock; the keeping of a stock record; special methods to hasten turnover; frequent buying; advertising lines; desirable to move quickly and expert salesmanship methods.

Mr. Noel's advice was to read and study the trade magazines, join local and national associations, analyze your own business, grow and balance enthusiasm with good judgment.

The financial statement as of August 31, 1918, shows assets of \$37,653.65. The accounts payable are \$2,384.50. Miscellaneous \$70.35. The surplus is \$37,198.80.

The convention passed resolutions declaring its opposition to compulsory health insurance laws. The loyalty of the Association was pledged to the President of the United States and our Government in the efforts put forth toward winning the war. A resolution was passed requesting the authorities in Washington to promulgate regulations that will permit students of pharmacy in recognized colleges to finish their training before being called into military service.

The convention pledged itself to support unequivocally the Government's program for combating venereal diseases. Support of those industries manufacturing articles constituting the stocks of merchandise of retail druggists was pledged in their efforts to obtain preferential treatment in the distribution of coal and raw materials.

Another resolution that attracted considerable attention embodied a declaration against the registration of persons as pharmacists who are not citizens of the United States or who have not at least taken out first papers certifying their intention to become citizens. Many persons have been permitted to become registered pharmacists without becoming citizens, and as they are not subject to the draft they have the advantage of loyal American citizens serving in the Army or Navy.

The officers elected for the ensuing year are:

President, Charles Harding, Cincinnati, O.; First Vice-President W. A. Orrin, Indianapolis, Ind.; second vice-president, H. B. Mayer, Memphis, Tenn.; third vice-president, Adam Wirth, New Orleans, La.; secretary, Samuel C. Henry, Chicago, Ill.; treasurer, Grant Stevens, Detroit, Mich.

James F. Finneran was re-elected chairman of the Executive Board.

CHAS. J. LYNN DISCUSSES WAR PROFITS

In a recent discussion on war profits, Chas. J. Lynn, president of the American Drug Manufacturers Association, said: "War profits in my opinion are those which are the direct result of the war, such as those made by manufacturers who furnish directly or indirectly material of whatever kind used in the prosecution of the war, and only that portion of the profit made on such material is war profit. In the case of the average mercantile house, they will not know what their actual profits have been during the period of the war until after the war is over and they have passed through a readjustment period and are able to strike an average, and in my opinion the average thus found will in many cases be less than the normal average for the pre-war period.

"Many concerns have shown a considerable increase in profits as expressed in dollars and cents, due to increased business resulting from the general prosperity of the country, without, however, having increased their normal percentage of profit even a small fraction. Other concerns not supplying materials for use in the prosecution of the war may thus far have shown an abnormal profit both in dollars and cents as well as in percentage due to the very large and rapid increase in the value of merchandise on hand. But this profit must later in practically every case be off-set by the very large and rapid decline in stock values the moment peace is declared.

"I think that in determining just what is a war profit these conditions should be taken into consideration."

The National Aniline & Chemical Company, New York, has commenced active construction work on the erection of 100 two-story residences, about 20x25 ft., at the site of its Marcus Hook, Pa., plant, each to cost about \$2,000. F. W. Van Loon, 4 North Eleventh Street, Philadelphia, is the contractor.

News of Companies

Fire, on September 17, caused by an explosion damaged a portion of the plant of the Aetna Powder Company, North Birmingham, Ala., with loss reported at \$10,000.

The American Agricultural Chemical Company, Carteret, N. J., will build a new three-story fertilizer plant at its Liebeg works, about 101x227 ft., to provide for increased operations.

The Tyler Drug Company, Buffalo, N. Y., has been incorporated with a capital of \$10,000 to manufacture drugs, etc. Frank W. and F. A. Tyler and A. C. Heegard, Buffalo, are the incorporators.

The Hampden Paint & Chemical Company, 317 Main Street, Springfield, Mass., is making alterations and improvements in its plant on Armory Street to cost about \$5,000. E. M. Baker is president.

The Wiz Products Company, Weehawken, N. J., has filed notice of authorization to operate at 22 First Street for the manufacture of washing and baking powders and kindred specialties. Samuel Falk, 22 First Street, heads the company.

The Barrett Manufacturing Company has had plans prepared for the construction of a new two-story reinforced-concrete factory about 40x50 ft., at Margaret and Bermuda Streets, Philadelphia. The structure is estimated to cost \$10,000.

The Dambur Chemical Works, Inc., Belleville, N. J., has been incorporated with a capital of \$125,000 to engage in the manufacture of dyestuffs, chemicals, etc. M. P. and A. Arlt, both of Allendale, and William J. Curtin, Brooklyn, N. Y., are the incorporators.

The Union Chemical Company, Cleveland, O., is said to be planning for the construction of a large new chemical plant to comprise about eighteen manufacturing units. It is understood that the project is estimated to cost in excess of \$1,000,000.

Fire, on September 11, caused by the explosion of one of the high-pressure stills at the plant of the Tidewater Oil Company, Bayonne, N. J., damaged the works to the extent of approximately \$25,000. One man was killed and eight injured by the explosion.

The Soap & Chemical Manufacturing Company, Hoboken, N. J., has filed notice of authorization to operate at 1414 Adams Street for the manufacture of soaps, chemicals, etc. P. B. Merblott, 766 County Avenue, Secaucus, is interested in the company.

The Radium Luminous Material Corporation, 150 Alden Street, Orange, N. J., has begun the construction of a new one-story building at its plant, about 17x35 ft., to be used as an acid building. H. R. Rowland is superintendent in charge of the work.

The National Wood Chemical Association announces that the annual meeting will be held in Buffalo, N. Y., with headquarters at the Iroquois Hotel on Wednesday, October 16. F. E. Clawson of Ridgeway, Pa., and F. E. Goodfellow, of Bradford, Pa., are president and secretary of the association.

POTASH PRODUCTION IN CANADA

Dr. R. F. Ruttan Discusses the Experiments Made With Feldspar—Cement Companies Installing the Cottrell System—A New Source of Potash Being Investigated

(*Special to DRUG AND CHEMICAL MARKETS*)

TORONTO, CANADA, Sept. 24.—A statement of the progress made towards the production of potash in Canada was recently made by Dr. R. F. Ruttan, of the Canadian Advisory Council of Scientific and Industrial Research. There is at present no process for producing potash from feldspar in operation in spite of reports to the contrary, Dr. Ruttan says. One process has been commercially successful in the United States. It is the hydrolysis of potash feldspar by means of lime and steam at a high pressure, which is worked in New Jersey and on the Hudson River for the production of a high grade of brick, the potash being a by-product.

It has been found that glauconite gives a better yield of both the brick-making material and potash than feldspar, and it is reported that a bed of glauconite has been found in British Columbia, which can be utilized for potash production. The condensation of potash salt from the vapors of cement works has been a source of supply in the United States, and one Canadian cement company has introduced condensation pipes for experiment. An analysis of the material used in this plant justified the expenditure necessary to install a Cottrell system, and if the cement dust of all the large cement works were analyzed, Dr. Ruttan said he felt sure that the result would encourage them to adopt the Cottrell process for the recovery of the potash.

A good deal of potash is now being made from hard-wood ashes, the old industry of collecting ashes and leaching them having been revived in some places, but no data as to the quantity of potash secured in this way is obtainable. Investigations are now being pursued at the Kingston School of Mining having in view the production of a fertilizer from nepheline cyanite, a rock containing 4 or 5 per cent of potash. Some progress has been made but it is not as yet certain that it is commercially feasible. While every encouragement has been offered for the investigation of methods for obtaining potash from feldspar there is no absolute proof that any of these processes would be commercially successful, Dr. Ruttan said.

LABOR CONDITIONS IN CHEMICALS

New York State chemical, oil and paint manufacturers reported slightly more workers in July than in June. The increase would have been more pronounced but for one large firm which experienced a decrease in employees. Total wages were 2 per cent greater than in June. In July, 1918, there were 2 per cent more workers than in July a year ago. The greatest advance occurred in miscellaneous chemical products which, due to an expansion in the manufacture of photographic supplies, employed 14 per cent more workers. Animal and mineral oil products, and paints, dyes and colors reported declines in employees of 2 per cent and 7 per cent, respectively. In the latter case the decline was primarily in the manufacture of aniline dyes. Aggregate wages were 23 per cent greater than a year ago, with all sub-groups contributing.

PUSHING W. S. S. CAMPAIGN

The plan to award an honor flag to the agents in the various trade organizations reaching their quota in the War Savings Stamp campaign has aroused great competition and brought excellent results as shown by reports to David Cummings, manager of the Trade News Bureau, 51 Chambers street.

WORLD PRICES ADVANCED IN 1918

Analysis of Imports at Port of New York During July Compared With Previous Years—Value of Chemical Products Imported

World prices continue to advance. A compilation by The National City Bank of New York, showing the average import prices in the fiscal year 1918 of a large number of articles representing production in every section of the world, shows prices even higher than those of 1917, which in turn exceeded those of 1916, 1915, and the fiscal year 1914, preceding the war.

These average import price figures of the great articles of commerce are an exceptionally accurate method of measuring broadly the advance in world prices. The import price of each article brought into the country represents its selling value in the country from which exported to the United States. As the aggregate importation of any given article represents in most cases the product of several different countries and covers large numbers of importations through many ports of the United States, and extending through the entire year, the average annual import price based on these figures may be accepted as a barometer of world prices in the article.

The "average annual import prices" quoted by the bank in its discussion of this question are obtained by taking the entire importation for the entire fiscal year of the article in question showing total quantity and total value as reported to the Custom House, and by dividing the quantity into stated value the average import price per unit of quantity for the entire year is obtained. If the average monthly import price is desired, it is obtained by utilizing the month's import figures by the same process. A comparison of these annual or monthly average import price figures with those of the preceding periods supplies an accurate barometer of average world prices in the article in question.

AVERAGE PRICE OF CERTAIN ARTICLES IMPORTED INTO THE UNITED STATES IN THE MONTH OF JUNE 1914 TO 1918

	Unit	1914	1915	1916	1917	1918
Cement	100 lbs.	.441	.556	.745	.734	1.00
Nitrate of soda	ton	28.58	33.50	31.86	42.06	45.48
Coal, bituminous	ton	3.03	2.74	3.19	3.58	4.85
Cocoa, crude	lb.	.107	.128	.137	.105	.105
Copper pigs and ingots	lb.	.142	.139	.249	.277	.221
Fibers, flax	ton	316.41	509.19	467.57	445.81	708.38
Hemp	ton	178.14	279.09	226.05	153.30	533.55
Jute and jute butts	ton	42.49	64.24	93.51	107.51	96.16
Manila	ton	194.95	164.49	198.42	258.49	361.96
Olive oil, edible	gal.	1.28	1.23	1.40	1.32	2.87
Flaxseed, seeds	bush.	1.37	1.18	1.54	2.94	2.63
Wood pulp, mech. ground	100 lbs.	.750	.745	.772	1.43	1.32
Chemical, unbleached	100 lbs.	1.72	1.70	2.13	4.24	3.17
Chemical, bleached	100 lbs.	2.32	2.21	3.80	5.66	4.89

The imports admitted free from duty at the port of New York during July, 1918, included:

Cinchona bark and alkaloids	\$69,912
Quebracho	166,367
Shellac	421,241
Other gums	95,502
Potash	86,925
Nitrate of potash	52,470
Nitrate of soda	1,822,031
Other chemicals	348,760
Cocoa, crude	2,213,535
Corkwood	57,945
Corkwaste	51,635
Jute	66,202
Flax, New Zealand	78,504
Burlap	1,388,040
Cocoanuts in shells	112,372
Cocoanut meat	85,355
Grease	691,371
Manganese ore	136,144
Tungsten bearing ore	3,423,239
Other steel hardening ores	129,505
Nickel	80,885
Oil, crude mineral	443,288
Other refined	164,505
Platinum	132,757
Seeds	117,346

Sulphur ore	45,568
Tin ore	2,271,354
Tin bars	2,450,964
Wax, vegetable	180,946

Among the July imports at New York which paid duty were the following:

Bristles	\$344,578
Brushes	159,417
Argols	418,543
Colors or dyes	107,029
Indigo, natural	327,719
Camphor, crude	142,666
Chicle	169,243
Licorice root	159,135
Citrate of lime	126,658
Opium	251,249
Vanilla beans	167,444
Other chemicals	412,986
Cork mfrs.	112,364
Olives	489,372
Almonds, shelled	447,462
Walnuts, shelled	139,986
Other nuts	162,549
Matches	209,100
Cheese	135,813
Oils, essential	89,902
Flaxseed seeds	2,674,247
Other seeds	101,939
Spices	267,514
Still wines	288,219
Starch	428,843
Cane sugar	10,954,001

The value of the imports during July was \$96,101,747, of which the free imports amounted to \$58,252,040 and the dutiable imports to \$37,849,707.

The exports during July, 1918, amounted to \$234,386,123, compared with \$208,868,978 in 1917.

SHORTAGE OF RADIUM PREDICTED.

The United States is facing a possible shortage of radium, and it has been predicted by Dr. Richard B. Moore of the Bureau of Mines that the commercial supply of the metal will not last more than six or seven years. Radium is largely being used on the faces of watches and clocks and for similar purposes. Physicians and surgeons are not purchasing enough radium to make the industry a financial success. Nine instruments used on airplanes have dials made luminous with radium paint; it is employed in the same manner for compasses and gun sights. The efficiency of night firing with machine guns and artillery is greatly facilitated.

While it is difficult to estimate the exact amount of radium now in existence, probably it is somewhere around three ounces of radium element. Considerable more than half the amount comes from Colorado and Utah carnotite ores, most of the deposits being owned by ore operating radium companies.

One method of preventing a future shortage is to provide a substitute. Mesothorium is an excellent substitute in many ways. Mesothorium can be obtained as a by-product in the treatment of monazite sand for the manufacture of thorium nitrate used in incandescent mantles. During the last year the United States Bureau of Mines has been experimenting along these lines and it is hoped that before long Mesothorium can be substituted for some of the radium now used in luminous products.

A maximum force of about 3,000 workmen it is expected will be employed on the construction of the Government picric acid plant at Grand Rapids, Mich. Work has already started and the maximum will be reached as rapidly as the plans can be developed.

The Central Chemical Company, Hagerstown, Md., has increased its capital from \$200,000 to \$600,000 for proposed extensions at its works.

Trade Notes and Personals

B. F. Getts, general manager of the N. E. Agriculture and Chemical Company's plant in Portsmouth, N. H., has recently been transferred to New York.

A loss of \$15,000 resulted from a fire, last week, in the two-story brick building of the Thromos Chemical Co., at Stewart Avenue and Cherry Street, Brooklyn. The company is making gases for the Government. No explosion occurred.

The Allied Drug Co., of which W. J. Fielding is president, and Peter L. Brown, secretary-treasurer, has purchased the Hotel St. Lawrence block at Port Hope, Ont., and will manufacture all kinds of drugs, employing about 75 hands.

Peter Gracoinas, a New York business man, was fined \$600 by Judge Morton in the United States District Court at Boston after he had pleaded guilty to a bill of information accusing him of violation of the pure food act in shipping a product of cotton seed oil from Boston to New York, which was labeled olive oil. He paid the fine.

Theodore Friedeberg of the Manhattan Machine Exchange, New York, was the highest bidder at the public sale of the A. W. Faber plant, which went under the hammer by order of Alien Enemy Custodian A. Mitchell Palmer. Friedeberg's bid of \$173,000 will be taken under consideration by the Government's agents. The plant is said to be worth \$225,000.

Dr. H. C. McNeil, lecturer on physical chemistry at George Washington University, has been appointed acting head of the chemistry department at the university to succeed Dr. Charles Edward Munroe, who has been granted an indefinite leave of absence in order to devote all his time to Government research work. Dr. Munroe has accepted the chairmanship of the committee on explosives of the Research Council.

An explosion in the chemical plant of the Barrett Manufacturing Company, Philadelphia, Pa., was followed by a fire which for a time threatened the Frankford Arsenal, a Government munition plant. Blazing chemicals fell into Frankford Creek and were swept toward the arsenal. Powerful streams were directed on the surface of the creek and the flames were forced to the opposite side.

In 1916 Saigon, French Indo-China, imported chemicals to the value of \$235,237 United States currency, of which \$178,139 worth came from France and \$42,404 worth from Hongkong. In 1917 this importation fell off to \$139,678, of which amount \$60,381 worth were shipped from Hongkong and \$47,607 worth from France. The principal heavy chemicals used, according to United States Consul Romillard, are copper and iron sulphates employed in the rubber industry.

The American Agricultural Chemical Company has declared a quarterly dividend of 2 per cent on the common stock placing the issue on an 8 per cent per annum basis. Heretofore the dividends have been 1½ per cent quarterly or 6 per cent per annum. The usual quarterly dividend of 1½ per cent on the preferred stock also has been declared. Both dividends are payable October 15. The directors organized for the ensuing year by electing G. B. Burton and T. A. Doe vice presidents. Mr. Doe continues as treasurer of the company.

ALL CHEMICAL GLASS NOW MADE HERE

American Industry Expands to Meet War Conditions —Necessary Raw Materials Scarce and Very Much Higher—Japanese Competition

Glass manufacturers are making the same lines today that they did before the war; in fact, they have not been forced to give up any line of wares on account of an inability to get raw materials. In most cases substitutes have been used with good results, but so far no successful substitute for potash has been discovered, and on this account a certain grade, the rich lead glass, has become inferior because of its dependence on the almost unobtainable carbonate of potash.

Information given recently by leading glass manufacturers of the country to members of the United States Tariff Commission throws interesting light on certain aspects of the glass industry and on the changes which war conditions have brought in manufacture and trade. J. Howard Fry of the H. C. Fry Glass Co., Rochester, Pa., in an interview, says that silica sand, red lead, saltpeter, soda, lime, potash, borax, manganese, arsenic, powdered blue, nitrate of soda in a limited amount, and barium carbonate, are the materials used in the glass industry. Nearly all these materials have increased in price because of the curtailment of supply.

Each month the glass business is increasing through Government orders. Chemical glassware, such as beakers and flasks, are used to test foods and water, reflectors for lighting are needed and there is a demand for tumblers for use in the Army and Navy. Before the war the chemical ware came principally from Germany. The price of the ware landed in this country was so low that there was no inducement for the domestic manufacturers to make it. Since the war five or six American factories are making chemical glass and as a result the price is kept down to a competitive basis.

Another line which is entirely new is the manufacture of glassware for baking and cooking. This heat resisting glass has been developed from the manufacture of the chemical line and it is recognized as a strictly American product.

A large quantity of chemical ware is used by the laboratories and colleges of the United States. If this ware comes in duty free under conditions similar to those existing prior to the war, manufacturers in this country say they will not be able to compete. They declare it is necessary to have tariff protection on this ware as well as on the "infant" branches of the industry. This stand in favor of protection was taken by Howard S. Evans of the Macbeth-Evans Glass Co. of Pittsburgh, who said:

"Before the war scarcely any of the laboratory glassware was manufactured in this country, but since the outbreak of the war our manufacturers have begun to produce all kinds of glassware for laboratory use. Some qualities are equal to, and in some respects, excel the foreign product. It has seemed to me to be rather unfair to the American manufacturer to permit the importation of this line of goods duty free."

J. E. Capen, salesmanager of the Macbeth-Evans Glass Co., adds that Japanese competition in this field strengthens the protective stand which manufacturers in this country have taken. He said anyone could readily see that Japanese concerns are copying our patterns exactly. To guard against too great foreign competition and to protect an infant industry are the chief reasons advanced by glass manufacturers who advocate a protective tariff.

The Drug & Chemical Markets

BOTANICAL DRUGS ACTIVE AND HIGHER

Herbs and Seeds Stronger—Business Restricted By Scant Supplies—Cultivation of Camphor in This Country Interests the Trade

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Canary Seed, South American, 8c	Menthol, Japanese, 45c
Fennel Seed, French, 35c	Mustard Seed, 40c@45c
Grindelia Robusta Leaves, 1/2c	Patchouli Leaves, 2c
Hemp Seed, Manchurian, 13/4c	Tumeric Root, 30c@35c
Lemon Oil, 35c	Valerian Root, Japanese, 30c
Lycopodium, U. S. P., 5c	Yerba Santa Herb, 1/2c

Declined

Celery Seed, 3c	Kola Nuts, 2c
Dill Seed, 2c	Saccharin, U. S. P., \$3.75@\$4.25
Foenugreek Seed, 1/2c	Sulphur Flour, Commercial, 45c
Jalap Root, 3c	

Scant supplies and delayed transportation of products are hampering trade in drugs and fine chemicals. Botanical drugs show increased strength. Japanese valerian, yerba santa and patchouli have advanced. Herbs and seeds are higher. There were sudden advances in canary and hemp seed, owing to Government embargoes on further importations. Celery seed is lower. Among miscellaneous items, Japanese menthol, lycopodium, and oil of lemon are higher. Saccharin, U. S. P., was reduced sharply, and commercial sulphur of flour is lower. Codeine alkaloid was advanced 50 cents and the sulphate 40 cents an ounce.

Increased interest is taken by the trade in the cultivation of camphor in Florida, now that the production of camphor in Japan has dwindled.

The heavy chemical market is fairly active considering the absence of dealers who are visiting the Chemical Exposition, and the tightness of the money market. Soda ash is in strong demand for shipment to the Far East. Caustic soda is firmer, owing to light stocks. Stocks rolling to New York are offered at \$4.25 per hundred pounds, and at warehouse, New York, \$4.35@\$4.50. Benzoate of soda is advancing with the approach of the fall canning season.

Fall business in dyestuffs and colors promises to be the best in several years. Trade is restricted, however, by the difficulty of obtaining intermediates, which makes it impossible for manufacturers to take on new business. Methyl blue has advanced in price and the market for metanil yellow and acid fast black is firmer.

Canary Seed—An unexpected advance of 8c a pound was registered, in response to Government embargoes on further importations. Stocks are scarce. Holders are now asking 25c@26c a pound for South American seed.

Celery Seed—Prices declined 3c a pound under larger offerings and smaller inquiries. Sellers are quoting 50c@51c a pound.

Codeine—The alkaloid was advanced 50c an ounce by manufacturers. Codeine sulphate is now held at \$8.25 per ounce, an advance of 40 cents, and other salts in proportion. The alkaloid is \$10.30 per ounce.

Cream of Tartar Crystals, U. S. P.—The continued scarcity of tartar supplies is holding prices very firm. Inquiries are active, owing to licenses for export par-

cels being again obtainable. Makers are quoting 69c for crystals and 69 1/2c a pound for powdered 99 per cent.

Dill Seed—Increased offerings led to price shading. Holders lowered quotations 2c to 21c@22c a pound.

Fennel Seed—Holders raised prices 3/4c to 17 1/2c a pound for French seed. The rise is attributed to scant stocks.

Foenugreek Seed—Recent slackening of buying orders and larger offerings resulted in a decline of 1/2c to 10 3/4c@11c a pound.

Grindelia Robusta Leaves—Lack of labor to harvest crops is causing an acute scarcity of supplies and rising prices. Sellers raised quotations 1/2c to 10 1/2c@13c a pound.

Guaiac Gum—Prices are difficult to quote owing to the extreme scarcity of supplies and absence of offerings. Scattered small quantities are difficult to locate and sellers are asking \$1.75@\$1.90 a pound.

Hemp Seed, Manchurian—Prices advanced sharply, due to Government embargoes on further importations. Stocks are small and holders raised prices 1 1/4c to 8c@8 1/4c a pound.

Jalap Root—Increased output of resin in Mexico caused an easier and lower market for the root. Holders lowered prices 3c to 42c@50c for whole root and to 52c@57c a pound for powdered.

Kola Nuts—In response to liberal offerings, due to recent light inquiries, prices eased off. Sellers are offering supplies at 2c lower to 25c@28c a pound.

Lemon Oil—Prices registered a gain of about 35c a pound in response to smaller stocks and larger inquiries. Handlers are now asking \$1.45@\$1.55 a pound for U. S. P. supplies.

Lycopodium, U. S. P.—Scant stocks resulted in a further price advance. Offerings were made at 5c higher to \$1.65@\$1.70 a pound, but only small lots are obtainable. Holders in most quarters are now demanding \$1.70@\$1.75 a pound.

Magnesium Carbonate U. S. P.—Prices are firmer and tending upward. The advance is attributed to the Government commandeering a large part of the production for use in covering steam pipes on standardized vessels. Sellers are repeating former prices of 20c to 21c a pound.

Mercury—Leading selling agents are quoting \$125 a flask of 75 pounds. Stocks are small and there is little available on the Pacific Coast. For small lots, up to \$129 a flask has been paid for prompt delivery.

Menthol, Japan—Although lower prices were cabled from Japan, quotations here ruled firm owing to a good inquiry. Sellers are quoting from \$4.45@\$4.75 a pound, showing a rise of about 45c a pound.

Morphine—In response to the Government demand which continues to take the bulk of the production, prices are being maintained on a firm basis, notwithstanding the larger supply of the crude material. Makers are quoting unchanged prices on the basis of \$11.80 a pound for 25-ounce lots in bulk for sulphate supplies. The new Dutch cinchona bark contract has been closed with the planters at Java and quinine makers at Amsterdam.

Mustard Seed—Prices advanced 1/2c to 23c@23 1/2c for California brown and 1/2c to 17 3/4c@17 1/2c a pound

for Bombay brown. The rise was due to larger inquiries and smaller stocks.

Patchouli Leaves—Increased inquiries and moderate offerings led to a firmer sentiment. Sellers are asking 2c higher to 76c@83c a pound, as to quality.

Peppermint Oil—High prices named here and in Western primary markets are retarding sales. Holders are quoting about \$4.70@\$5 for supplies in tins and \$4.95@\$4.55 in bottles. Bulk lots are held at \$4.40@\$4.50 a pound.

Potassium Permanganate—Spot offerings by first hands continue small. For prompt shipments \$1.75@\$1.90 a pound is quoted, as to quantity purchased.

Opium—Aside from a steady movement of supplies into consumption, a general quiet pervaded the markets. Holders are quoting former prices for supplies in cases, of \$21.50; powdered \$23.50; and granulated \$24.50 a pound.

Quinine—The demand for spot lots is narrow. Second hands are shading prices and gradually nearing domestic makers' price on the basis of 90c an ounce for the sulphate, in lots of 100-ounces in tins. The new Dutch cinchona bark contract has been closed with the planters in Java and quinine makers at Amsterdam. The contract, which dates from July 15, 1918, runs until December 31, 1923. The fixed price for the bark is 6c per 11-10-pounds for each unit per cent of quinine sulphate. The price outlook under the contract is favorable to planters and tends to keep the monopoly of quinine manufacture and cinchona bark planting in Dutch hands.

Rochelle Salt, Crystals—Owing to the stronger statistical position, prices continue firm with an upward trend. Makers are quoting supplies in boxes at 47c, while powdered in barrels is held at 46½c a pound.

Saccharin, U. S. P.—Increased offerings led to further price reductions. Sellers are offering soluble at \$26.50@\$27 and insoluble at \$25.50@\$26 a pound. For October delivery insoluble, according to reports, was offered at \$23 a pound. Above figures show declines of \$3.75@\$4.25 a pound for soluble and insoluble respectively.

Seneca Root—The crops have been harvested according to reports from the West and as the yield is short, due to lack of labor, predictions are that prices will go to much higher levels. Holders are asking \$1.05@\$1.10 for Northern, and \$1@\$1.05 a pound for Southern.

Sulphur Flour, Commercial—Prices are weaker for insecticide and fertilizer uses. Holders lowered quotations 45c to \$1.80 per 100 pounds.

Thyme Seed—The price of French supplies was raised ¼c to 1¼c a pound. Smaller supplies and fewer arrivals were responsible for the advance.

Thymol Crystals, U. S. P.—Quotations closed firmer but unchanged at \$13@\$13.25 a pound. This is attributed to large Government inquiries, which may lead to large inroads on present full stocks.

Tin Oxide—Lack of crude materials, which has checked the production of large quantities led to stronger prices. Makers, however, are repeating quotations of 90c@95c a pound.

Turmeric Root—Firmer primary markets and smaller arrivals caused fractional advances in prices. Holders are asking ¾c higher to 12¾c for Madras, and ½c advance to 10½@10¾c a pound for China root.

Valerian Root, Japanese—With a further increase in the demand and curtailed supplies on the spot, prices advanced sharply. Sellers raised quotations 30c to \$1.40@\$1.50 a pound.

Yerba Santa Herb—Owing to reports of lack of labor to harvest the crop prices were advanced by holders 1½c to 8½c@9½c.

GROWING NEEDED MEDICINAL PLANTS

Reports from the University of Wisconsin indicate that the cultivation of medicinal plants on a commercial scale has been greatly extended by the Pharmaceutical Experiment Station connected with that institution during the present year. About ten acres of drug plants are now under cultivation, and the season's crop will include a wide range of drug plants of commercial or experimental value.

Since the legislature authorized the development of drug plant cultivation on a commercial scale and the station received a forty-acre plot for its work about a year ago, the work of transplanting from the old garden has been completed and the garden is rapidly approaching the size planned. The three acres of two years ago was increased to six acres last year; now ten acres are under cultivation.

This season's crop will be used for experimental purposes, and any surplus will be sold for commercial purposes. The digitalis raised in the garden last year was given to the army for use in its hospitals, and, after being milled and sifted, is now being worked up into tincture in the station laboratories. This season's cultivation includes one acre of poppies, raised for the oil of the seed; one acre of belladonna, for the leaf and root; one acre of henbane, for the leaf; one-half acre of wormwood, for the oil, and three-quarters of an acre of digitalis, for the leaf. An acre of rye is being grown as a cover crop for two species of the monarda, one of which contains thymol, which is used as a cure for the hookworm.

About twenty-five other varieties of plants are under cultivation, including sunflower, perilla, lallemantia, all three for their oil; jimson weed, lovage, blessed thistle and others used for experimental purposes. One-tenth of an acre is planted to Iris Germania, one-tenth to Iris pallida, both yield orris root; one-tenth to blue flag, and one-tenth to sweet flag. Several medicinal plants are being cultivated under natural shade conditions. Male fern, may apple, bloodroot, geranium, hepatica and valerian have been successfully started.

CANARY SEED IMPORTATION RESTRICTED

The War Trade Board has announced that canary seed, hemp seed and alfalfa seed have been placed on the list of restricted imports. All outstanding licenses for the importation of these seeds have been revoked as to ocean shipments from abroad after Sept. 18, the importation of hemp seed and canary seed by ocean shipment from abroad being totally prohibited after that date. It is estimated that a saving of 1,800 dead-weight tons will be effected by these restrictions.

In the western portion of Fife, Scotland, 1,300 acres were placed under flax cultivation this year. Experts describe the crop as excellent. A large contingent of girls, the majority from universities and schools of Glasgow and Edinburgh, did the work, and for their accommodation while there, the Carnegie Dunfermline Trustees placed a section of the clinic building in Dunfermline at their disposal.

Large importations of caraway seed were received by J. J. Tolendo & Co., and by P. E. Anderson & Co., amounting to about 100,000 pounds and 35,000 pounds respectively.

Heavy Chemical Markets

STRONG DEMAND FOR CHEMICALS

Silicate of Soda Advances Owing to Seasonable Requirements—Bleaching Powder Slightly Higher—Soda Ash Firm—Salicylic Acid Lower

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Benzoinic Acid, 10c lb.
Benzote of Soda, 5c lb.
Bleaching Powder, 1/2c lb.
Carbon Tetrachloride, 10c lb.

Declined

Carbolic Acid, 3c lb.
Copper Sulphate, 3/4c lb.
Oxalic Acid, 3c lb.

Caustic Potash, 2c lb.
Caustic Soda, 5c, 100 lbs.
Permanganate of Potash, 5c lb.
Silicate of Soda, 20c 100 lbs.
Naphthalene Flake, 1/2c lb.
Potassium Bichromate, 3/4c lb.
Salicylic Acid, 15c lb.

There is a strong demand for chemicals, but raw materials are needed in such quantities for Government purposes that manufacturers are unable to take on new business. Under these conditions prices remain firm and some products are advancing owing to seasonal demands or scarcity. There is an increased inquiry for export owing to the action of the War Trade Board in releasing several products for foreign shipment under new agreements with neutral countries.

Stocks of acids are small and prices firm. Owing to the approach of the canning season there is an increasing demand for benzoate of soda. Salicylic acid is easier because of larger supplies. The difficulty of obtaining export licenses discouraged holders and several lots are now on the local market. Bleaching powder is higher. The Government has taken over large supplies and the paper mills are again buying in quantity. There is very little carbon tetrachloride to be had in the market. The accelerated demand for permanganate of potash has overcome the imports of the Japanese product and the price has advanced. Naphthalene flakes are slightly easier. Sulphide of soda is very strong. Soda ash is in demand for export to the Far East, but must be shipped from Western works.

Caustic soda is stronger. Stock rolling to New York was sold at \$4.25 and spot stock at warehouse, New York, at \$4.35@4.50 per hundred pounds. The price of soda ash in double bags is \$3.25 at works, and in single bags, New York, \$2.60. Stocks in barrels are in scant supply.

Acids—Carbolic acid is lower. Salicylic is easier, owing to larger supplies. Stocks have been accumulating owing to a decrease in the demand for export. Licenses are not as liberally granted and the trade with Great Britain, Italy and Spain has fallen off. Benzoic acid is going up. There is a better demand as the canning season approaches, and there is evidence that speculators are already in the market and will keep prices firm. Only three large manufacturers are now producing. One company that has been a large producer is in financial difficulties, another has been taken over by the Government, and the head of a third company has been interned. Acetic acid is held at high prices by dealers who have control of limited stocks. Manufacturers are conforming to Government regulations and most of the production goes into war work. Producers of sulphuric are unable to take new business. Muriatic is difficult to obtain. Government prices prevail on these acids and very little is released for consumers.

Alums—There is a heavier domestic demand, a good call for export, and large lots are extremely scarce. Spot

stocks are held at firm prices. Closing quotations were: 5 1/4c@5 1/2c a pound for ammonium lump; 5 3/4c@6c for the ground; 5 3/4c@6 1/4c for the ammonium powdered. The chrome is quoted at 19 1/2c a pound.

Aluminum Sulphate—The high test is held at 3 1/2c@4c per pound and the low test at 2 1/2c@3c.

Arsenate of Lead—There is a brisk demand for spot supplies and prices are very firm owing to the limited stocks. The paste is quoted at 15c@17c per pound, and the powdered at 31 1/2c@33c.

Barium Chloride—Prices are slightly easier. The offerings have been somewhat larger and while the demand is good the competition has resulted in much lower quotations. In ton lots the price at the close was \$80@ \$90.

Bleaching Powder—With the approach of cooler weather the demand for bleaching powder has improved. There is an increased export call, and the paper mills are placing new orders. Large quantities are being taken by the Government. The price advanced during the week and at the close 5c was the inside quotation and 5 1/2c the outside price with the majority of holders.

Carbon Tetrachloride—Government control of this chemical has made it difficult for consumers to locate supplies in the open market. While occasional lots have been picked up at 65 cents a pound, the price is practically nominal as very few dealers have any spot stocks to offer.

Copper Sulphate—There is a strong undertone to the market. New prices announced this week are 9 1/2c@10c per pound for the large 99 per cent crystals, and 9 3/4c for the 98 per cent.

Copperas—Prices are slightly easier and at the close offerings were made at \$2.15 per hundred pounds against quotations of \$2.20 last week. The demand is active and producers say that available supplies are limited, but the difficulty of obtaining export licenses has eased up the call and a few lots have appeared on the market at the lower price.

Lead Acetate—The demand is brisk. Prices were 15 1/4c@16 1/2c for the brown sugar; 16 1/4c@17c for the broken cakes; and 17 1/4c@17 1/2c for the granulated.

Potash, Caustic—The demand is steady under an active inquiry. The range of prices was 73c@75c a pound, although a few lots were offered at slightly lower figures for the high test. The commercial grade is held at 61c@62c. Potassium bichromate is offered at 44c@45c.

Permanganate of Potash—Under an accelerated demand the market has been cleared of surplus stocks and prices are firmer. The weakness caused by heavy imports of the Japanese product has been overcome. Quotations at the close were \$1.80@\$1.90.

Soda, Caustic—The market is stronger and the inside price has been advanced to \$4.35 per hundred pounds for the 76 per cent. The range is \$4.35@\$4.60. In some directions the quotation was \$4.40 as the minimum. There is a good demand for ground caustic and quotations range from \$5.25@\$5.50.

Soda Ash—Prices for soda ash are firm and the inquiry is active. Prices ranged from \$2.50@\$2.65 for stocks in bags. Dense ash is selling at \$3.25@\$3.50 per hundred pounds. There is an increasing demand for silicate of soda, and the 40 per cent is held at \$2.60@\$2.80 per hundred pounds.

Sulphide of Soda—Prices are stiffening, owing to the demand in the leather trade. Holders are asking 9½c @10c compared with quotations of 3¾c last fall. Sulphide of soda is used in tanning puttees and it is said in the trade that the Government is taking 50 per cent of the output of two of the largest manufacturers. There are only about five producers in the country. Congestion in the car situation in the South has delayed shipments and spot stocks are limited.

HEAVY CHEMICALS FIRM IN ENGLAND

Sir S. W. Royse & Co., of Manchester, England, say of heavy chemicals: The export position of sulphate of copper is unchanged, although the demand from France has been better. Green copperas continues in good demand. Supplies of alum and sulphate of alumina are scarce. Acetates of lead continue in short supply and prices are again higher. Nitrate of lead and litharge are quiet. Oxalic acid is only moving off slowly. There is a better demand for prussiate of soda at the reduced price, although business is still confined to near delivery. Wood naphthas are selling at higher prices. Makers of phosphate of soda are booked well ahead and are not caring about further sales with the uncertainty in regard to Government demand.

In Tartaric acid good business has been done for next year's delivery and the market is firm owing to the heavy fall in the Italian rate of exchange and the uncertainty in regard to the new crop. Supplies of cream of tartar on spot are sufficient to meet demands but prices for forward shipment have been withdrawn until the Italian Exchange is more stable. Arsenic has latterly been in better request and the market is firming, but there is little inclination to cover forward requirements. Muriate of ammonia has been advanced about £13 per ton and there are some good inquiries from abroad, but Export licenses are only being granted for small quantities in view of Government requirements. Carbonate of potash is higher owing to shortage of stocks. Supplies of Montreal potashes continue small and there is little prospect of early improvement as labor in Canada is being concentrated on the harvest.

Benzoles and toluoles are unchanged at controlled prices. The demand for Solvent Naphta has fallen off and prices are easier. Creosote remains unchanged, supplies being readily taken up by official requirements. Crude carbolic is in fair demand with values steady. Pitch continues firm in tone but with little business passing. Sulphate of ammonia keeps in good demand for the home trade and all available supplies are readily disposed of on Government terms; for export, business is very small.

In the heavy alkalies, bleaching powder is higher on an increased enquiry, but caustic soda has not varied. Chlorates of potash and soda are steady at unchanged prices.

A moderate business in farinaceous materials is reported. A small shipment of American maize starch has come forward and has been quickly absorbed at full market figures. Japanese farina and dextrine are steady. Sulphate of barytes commands full values with little offering of the ground white quality. Textile soap is quiet but firm.

The General Chemical Company, West Adams Street, Chicago, Ill., has broken ground for the construction of its proposed new plant on One Hundred and Twenty-Third Street and Carondolet Avenue. The structure will be 120x143 feet, and is estimated to cost \$50,000. E. B. Bragg is local manager.

PRICES OF SULPHUR IN ITALY

New maximum prices for Italian raw and worked sulphur were fixed by a recent ministerial decree. The new schedule consists of two categories—prices in Sicily and prices on the Continent and in the islands other than Sicily.

The maximum prices in Sicily for worked sulphur per quintal of 220.46 pounds are: Refined, in bricks, packing extra, 58.37 lire (at normal exchange the lira is worth 19.3 cents); refined, in sticks, 60.37 lire; sublimated, pure, 70.31 lire; raw, ground, 53.50 lire; refined ground—60 to 65 per cent of fineness, 64.51 lire; 65 to 70 per cent, 65.14 lire; 70 to 75 per cent, 65.77 lire; refined sifted—75 to 80 per cent, 66.69 lire, 80 to 85 per cent, 68 lire; 85 to 90 per cent, 69.31 lire. In the prices for sulphur in powder the value of the packing canvas, to be given separately in the invoice, is not included.

The prices for worked sulphur are for goods at Catania, Licata, Porto Empedocle, and Termini Imerese, f. o. b. or on car at station. For sales in other localities of Sicily the prices of worked sulphur are to be increased by the costs of carriage, as shown by invoice, and loss by diminution, which can not exceed 1 per cent and will be applied only to refined sulphur in bricks.

On the Continent and in the other islands the prices for worked sulphur are those indicated above, increased by the costs of carriage and of the loss by diminution. For ground sulphur mineral the following f. o. b. prices are established: Mineral containing from 25 to 30 per cent of sulphur, 14.25 lire per quintal; 30 to 35 per cent, 16.60 lire; 35 to 40 per cent, 18.96 lire; 40 to 45 per cent, 21.32 lire; 45 to 50 per cent, 23.68 lire. These prices do not include the value of the packing canvas.

To the decree is annexed a list of normal prices for unworked sulphur, which is made the basis of the new prices for raws. In Sicily the prices for raw sulphur are those fixed in this list, plus a commission of 5 centesimi in favor of the Association for the Sicilian Sulphur Industry. On the Continent and in the other islands the list prices for raw sulphur are further increased by the costs of carriage to destination, as shown by the invoice or established by calculation (on the basis of the railway tariff increased by 20 per cent), as well as loss by diminution not to exceed 2 per cent.

TEXAS CANDELILLA WAX INDUSTRY

One of the choicest tracts of land for growing candelilla in Hudspeth County, Texas, embracing 50,000 acres, was recently leased from the State of Texas by the International Wax Company of San Antonio. It is capable, according to the opinion of experts, of supplying four factories with a sufficient quantity of raw material to turn out a total of one ton of wax per day. The harvesting of the weed and the operation of the plants are to be continuous.

An important feature which now receives consideration when dealing with the revenue possibilities of the industry is that it was recently discovered by a chemical analysis of the ash residue of the bagasse that comes from the candelilla after the wax has been extracted that it contains probably the highest per cent of potash of any known species of vegetation. The dried bagasse of the candelilla is used for fuel in the factory, and from the ashes enough potash may be obtained to pay the entire expenses of operating the industry, it is claimed.

The Imperial Chemical Company, Ann Street, Grand Rapids, Mich., is planning for improvements and extensions in its works. It is said that the present capacity will be increased.

Color & Dyestuff Markets

GOOD MARKET FOR DYESTUFFS

Fall Outlook the Best In the Last Three Years—
Methylene Blue Advanced—Phthalic Anhydride
Growing Scarce—Benzoate of Soda Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Benzoate of Soda, 5c lb.
Cresol, 1c@2c lb.
Dinitrophenol, 3c lb.
Methylene Blue, 35c lb.

Declined

Benzaldehyde, 25c lb.
Diamidophenol, 50c lb.

P-Amidophenol Base, 25c lb.
P-Nitraniline, 5c lb.
Phthalic Anhydride, 50c lb.
Xylene, Commercial, 5c gal.

Pheno, 2½c lb.
Resorcin, Technical, 75c lb.

The Fall business in dyestuffs and colors promises to be the best in the last three years, and would exceed expectations if the tight money situation due to preparations for the Liberty Loan had not curtailed credit temporarily. The general line of colors is active, but some dyes are in small supply because of the call for toluol for munitions, the restrictions on shipping from the primary markets for dyewoods and dye bases, and the scarcity of phthalic anhydride. Methylene blue, metanil yellow, and acid fast black have been advanced in price during the week.

Intermediates are in strong demand and cannot be obtained in sufficient quantity for manufacturers to accept new orders at the present time. Aniline oil, however, is in somewhat better supply. Para-amidophenol base has been advanced because of limited production. Two companies have ceased to manufacture this product. Others are in the experimental stage of manufacture only and the market is awaiting tests of the new material which they will turn out. Para-nitraniline is held at \$1.85@\$1.95. During the summer manufacturers had to stop production owing to the hazard, but are now making it again and may soon catch up with the demand. There is a big export demand for phthalic anhydride and the price has advanced to \$4.25@\$4.75.

Scarcity in dyewoods is still restricting trade and the shipping situation shows no signs of improvement. Very little fustic remains in the market. Logwood has arrived in small amounts, but was sold long ago, and none of it reached the open market.

Dye Bases and Dyewoods

Albumen—The demand exceeds the supply and arrivals continue light. Chinese egg is firm at \$1.30@\$1.35 a pound. Holders of imported blood are asking 90c@95c a pound. The domestic blood is quoted at 65c@70c. Advices from primary points are so uncertain as to future shipments that dealers are loth to quote on forward positions.

Cochineal—There is a strong demand for the gray-black variety at 70c@75c per pound. On the rosy-black prices are nominal. Silver Teneriffe is held at 90c a pound as the inside quotation and \$1.05 as the maximum.

Cutch—Stocks of Borneo are offered at 15½c with 13½c as a minimum price for spot stocks. Rangoon is 23½c@24½c a pound. Shipping conditions have not improved and there is great uncertainty regarding future supplies.

Divi Divi—The demand continues active and prices are advancing. Some holders are asking \$85 per ton. Sales of small lots were reported at lower figures, but supplies are limited and importers cannot fill the orders being placed.

Fustic—The chips are in steady demand and prices range from 3½c@6c per pound. The 51-degree is quoted at 14c a pound. The sticks are held at \$45@\$55 a ton.

Gambier—The common gambier is selling at 21@23c a pound. Supplies are not abundant and it is probable that prices will be firmer in the near future. Singapore cubes are 29c@30c. Java cubes are held at 19c@20c.

Indigo—There seem to be sufficient supplies to meet the demand, but stocks are moving rapidly and prices are firm. The Bengal is quoted at \$3.00@\$3.50. The Oudes and Kurpah grades are held at \$2.25@2.75 and the Guatimala at \$2.30@2.75. The paste is 24c@26c a pound. The Madras is held at 90c@\$1.00.

Logwood—The price of chips remains about the same with offers at 3½c@5c per pound. The solid is held at 21c@22c a pound. Arrivals of logs are at long intervals and there is little offered on the open market. Very few sales have occurred and quotations range from \$50@\$56 a ton.

Coal-Tar Crudes

Benzol—Prices remain at the same level. Supplies are ample for all orders, but the inquiry is increasing and sellers are asking 25c@30c for the water-white grade. The demand is not keeping ahead of the production, but may absorb the surplus as business improves.

Naphthalene—The flakes are slightly easier with offerings at 8½c@8¾c a pound. Consumers are holding off, but the druggists will place their contracts in October-November and prices may stiffen.

Phenol—This coal-tar crude is weak at 41@42c per pound. Supplies are ample for more business than is being placed at the present time.

Toluol—There is so little released by the Government that manufacturers are having difficulty in getting supplies and until the gas companies increase the production it will be impossible to enlarge the production of dyes dependent upon this crude.

Intermediates

Acid H—Producers are sold up and dealers have very little H acid in stock. Prices remain at \$3.25@\$3.50, which is purely nominal as the market is practically bare of stocks.

Acid Naphthionic—The market is easy as supplies are ample to take care of the business offered. The refined is quoted at \$1.20@\$1.30 and the crude at \$1.05@\$1.15.

Acid Sulphanilic—The crude is offered at 31@33c and the refined at 41c@44c per pound. There seems to be sufficient on the open market to fill orders for immediate shipment.

Aniline Oil and Salts—Sales were made at 28c during the week and the market seems firmer, with some producers asking 30c a pound. The salts are offered only in small quantities by a few holders. Producers say they are sold up for some time ahead.

Benzaldehyde—There is a strong demand, but com-

petition has been pronounced and weakened the market. Prices range from \$3.50@\$4.00 a pound. Supplies are easy to obtain.

Benzoate of Soda—Prices are advancing. With the approach of the canning season the demand has increased. Speculators are entering the market in view of the growing inquiry and the fact that several plants are no longer producing. Quotations were raised to \$2.80 @2.90 per pound.

Benzidine—The market is quiet and the base material is quoted at \$1.75@\$1.85 a pound. The call for the base and the sulphate is fair and supplies are about sufficient to meet the demand.

Para-Amidophenol—This material has advanced in price to \$4.25@\$4.50 per pound for the base. The product of two new companies is offered, but the trade is awaiting the result of tests before buying liberally. Two former manufacturers have discontinued the production of this intermediate and the supply is not abundant.

Para-Nitraniline—Quotations on this product were advanced to \$1.85@\$1.95 owing to the demand and scant supplies, due to the discontinuance of its manufacture during the summer months. Many producers were unwilling to assume the hazard and cut it out entirely but are now making it again.

Phthalic Anhydride—The heavy export demand has caused makers to raise their prices. There is a very great shortage in supplies and one producing company was obliged to make purchases to cover its contracts. Quotations are \$4.25@\$4.75 a pound.

MONCURE HOPE

Moncure Hope, a member of the editorial staff of DRUG AND CHEMICAL MARKETS, died in the Brooklyn Hospital on Tuesday, Sept. 24, after a few days' illness due to ptomaine poisoning. Mr. Hope was born in Virginia about 30 years ago. He was educated at Washington and Lee University and took a special course at New York University. For several years he was the editor of a well-known trade paper and came to DRUG AND CHEMICAL MARKETS about one year ago. His conscientious work in dyestuffs and heavy chemicals attracted the attention of the trade because of the completeness of his reports and the accuracy with which he reflected conditions in the market.

Mr. Hope was a Mason and became affiliated with a Brooklyn lodge. Members of his family have arrived and after services here the body will be taken to Virginia for burial. The family have received numerous testimonials of the affectionate regard in which he was held by his associates and the friends he made in the chemical and dyestuff industries.

The business of G. Siegel & Co., Rosebank, S. I., manufacturers of colors, was sold by A. Mitchell Palmer, Alien Enemy Custodian, to Coffin & Co., investment brokers, for \$509,600. Announcement of the name of the concern on whose account the purchase was made was not forthcoming, although it was reported that the concern is located in Bethlehem, Pa.

Nine of the fifty-one members of the committee of revision of the United States Pharmacopoeial Convention have died. To succeed eight of these deceased members, the committee has elected the following named men: Prof. A. H. Clark of Chicago, Prof. E. Fullerton Cook of Philadelphia; Prof. W. B. Day of Chicago; Samuel L. Hilton of Washington; H. P. Hynson of Baltimore; J. K. Lilly of Indianapolis; Leonard A. Seltzer of Detroit and Prof. W. J. Teeters of Iowa City.

IN DEFENSE OF AMERICAN DYES

Alexander Alexander explains the technical causes of the failure of American dyes to meet public expectations at the outset, in a letter to the "New York Times" in which he says:

"The making of colors is a highly specialized business. Colors are not alone made for particular shade, but for dyeing particular fabrics a certain shade, and they are further subdivided so that they dye a particular fabric for a particular purpose. We speak now of proper dyeing. Some colors will dye cotton, wool, or silk equally well, but they are rare and exceptional. The vast majority of colors will dye either cotton, silk, or wool properly; that is, will show a brilliant shade; will not fade in the wash, and they will have other necessary, good qualities. Cotton colors dye cotton; silk colors dye silk; wool colors dye wool."

"If cotton is dyed with logwood black, a black will be obtained which might appear as good as a black obtained by dyeing with sulphur black, which is the proper black for certain cotton, but the logwood black will not be fast to perspiration and will tend to crack, and will have many bad qualities which the sulphur black will not have. On the other hand, if you use the logwood black for silk or wool, it will be fast, and will stand slight acid or alkaline reactions, and will be bright, besides adding feel or hand, whereas if you use sulphur black for silk or wool the results would be very bad."

"At this time, when the American aniline industry is assuming large proportions, and when new colors are being evolved constantly, it is important that our people should know the truth about this new American industry. It must also be remembered that aniline color manufacture is only one branch (although a very important one) of the organic chemical industry. The production of explosives, illuminating and fuel oils, natural and artificial remedies for disease, photographic materials, margarine, soap, rubber, perfume, artificial silk, and celluloid, whether inflammable or noninflammable, is intimately connected with the principles and practice of organic chemistry, while the production of spirituous liquors, dairy produce, meat extracts, and cereal foods has undergone marked improvement in consequence of applying this branch of knowledge to its control. The general public should know that organic chemistry, which is a distinct section of science, and of which aniline color manufacture is only one branch, is expanding along proper lines in America. We may confidently hope, if given a reasonable time, to be able to compete in price as well as in quality with anybody throughout the world, providing we have proper protection, covering the cost of basic raw materials and labor."

The Dobbins Soap Mfg. Company, Federal Street, Camden, N. J., is having plans prepared for the construction of an addition to its plant; alterations and improvements will also be made in the present factory. The work is estimated to cost \$20,000.

The Rogers-Pyatt Shellac Company, 81 Water Street, New York, will construct a new one-story addition to its five-story plant at 39-43 Essex Street, Jersey City, N. J., to cost about \$25,000. The extension will be used for increased capacity.

The Tincture and Extract Co., according to a rumor now current in Philadelphia, has secured by contract the entire output of iodine of the Hercules Powder Co.'s California kelp plant.

The Foreign Markets

LONDON DRUG TRADE IMPROVING

Better Export Demand Noted—Aspirin, Cascara Sagrada, Citric Acid, Menthol and Oil of Peppermint Higher—Japanese Camphor and Quinine Firmer

(Special Cable to DRUG & CHEMICAL MARKETS)

LONDON, Sept. 24.—There is a general improvement in the drug and chemical market. Business is more active in domestic lines and the demand for export is better.

Quotations have been advanced this week on amidopyrin, aspirin, cascara sagrada, citric acid, menthol, oil of peppermint and saffron.

The market is firmer for Japanese camphor, lemon oil, quinine, tannic acid and tartaric acid.

There is an easier tone in the market for acetanilid and pimento.

Milk sugar and turpentine are lower.

The Spanish Government has assumed supervisory control of all mining concessions already granted or to be granted producing potash salts and other substances entering into the manufacture of fertilizers, according to the text of a law recently passed. The law also authorizes an appropriation of \$15,296 for the surveying and exploiting of the already discovered sources of potash in the provinces of Barcelona and Lerida, owned by the Government.

TRADE AGREEMENT WITH DENMARK

WASHINGTON, D. C., Sept. 24.—An agreement has been concluded between the War Trade Board and a special Danish commission, under which certain commodities will be exported to Denmark. The following drugs and chemicals are included in the agreement:

Two hundred tons (metric) lime borate; 600 tons coal pitch, 12,500 tons calcined soda, caustic soda and soda ash; 270 tons sulphur, 20 tons citric acid, 90 tons tragacanth and various gums; 15 tons refined turpentine, 500 tons oil turpentine, 150 tons talc.

In addition chemicals, if approved, drugs, medicines and medicinal supplies, including mercury in medicinal form and for medicinal purposes, will be shipped in quantities in accordance with actual Danish requirements for home consumption.

The list also includes 10 tons of castor oil for medicinal purposes and 400 tons soaps and powders.

AUGUST FOREIGN TRADE BREAKS RECORD

Both imports and exports of merchandise were greater during August than in any previous August in the history of American foreign trade, according to an announcement by the Bureau of Foreign and Domestic Commerce, Department of Commerce.

Imports amounted to \$273,000,000, an increase of \$5,000,000 over August, 1917, and \$31,000,000 over July of this year. During the eight months ended with August, imports were \$2,060,000,000, a slight increase over the corresponding period of 1917.

Exports increased from \$508,000,000 in July to \$529,000,000 in August, as compared with \$488,000,000 in August, 1917. During the first eight months of this year exports totaled \$4,012,000,000, a decrease of \$138,000,000 as compared with a similar period in 1917.

Notes on New York Imports

The Maxim Hershey Seed Company is credited with an importation of over 112,000 pounds of caraway seed.

About 35,000 pounds of foenugreek seed was imported by P. E. Anderson & Co.

J. N. Limbert is credited with an importation of 1,000 pounds of vanilla beans.

Nearly 40,000 pounds of crude camphor arrived here recently, consigned to Mitsui & Company.

About 12,000 pounds of cochineal comprised an importation by the Hagemeyer Trading Company.

Over 27,000 pounds of precipitated chalk was imported by the National Aniline & Chemical Co.

A large consignment of gum arabic was received recently by the National Aniline & Chemical Co.

The Midwood Chemical Company received a consignment of about 200 pounds of blood suckers.

Consignments of about 120,000 pounds of crude tartar are credited to the Tartar Chemical Company.

About 63,400 pounds of carnauba wax was imported by the American Trading Company.

A. H. Smith & Company and Park & Tilford received importations of about 2,700 pounds and 3,700 pounds of various brands of essential oils.

An importation of quinoidine comprising some 5,000 ounces was received by the Powers-Weightman-Rosen-garten Company.

ENGLAND'S ALKALI PRODUCTION

In the recently published annual report on alkali production in the United Kingdom the number of works registered in 1917 is given as 1,582, or 22 more than in 1916. The use of nitre-cake in place of sulphuric acid, for decomposing salt in salt-cake furnaces, was further extended during the year, so that the relative production of hydrochloric acid per unit of salt cake was again lessened. A new works for the production of alkali by electrolytic methods is expected to influence manufacturing units.

It is estimated that about 50,000 tons of potash are carried away annually in the gases from iron blast furnaces in Great Britain. The loss of tin under the present method of working its ores is estimated at over 35 per cent.

In the manufacture of sulphuric acid, a new feature was the introduction of catalytic methods for supplying the necessary nitrogen compounds for the chamber process. The ammonia products manufactured from gas liquor were distinctly greater in 1916, despite the inferior quality of coal and other drawbacks.

Japan's annual domestic consumption of caustic soda amounts to between 50,000,000 and 60,000,000 pounds, and about 70 per cent of this quantity is met by home output, the shortage being imported from the United States. The American embargo on the export of caustic soda will have the effect of stiffening prices in Japan.

Imports and Exports of Drugs and Chemicals, Dyestuffs, Etc.

Imports from September 14 to September 21—Exports for month of July

Owing to the strict regulations of the Treasury Department forbidding the publication of the names of importers receiving consignments and the names of ports of shipment, this feature of the service is omitted by DRUG AND CHEMICAL MARKETS during the period of the war. Subscribers interested in any special product will be assisted in locating supplies if they will communicate with the Editor.

Imports

BEANS—
1,500 pounds vanilla
CAMPHOR, CRUDE—
40,000 pounds
CHALK, PRECIPITATED—
28,000 pounds
CHEMICAL PREPS.—
100 pounds
COPRA—
7,100 pounds
CUTTLEFISH BONES—
5,500 pounds
DYES AND DYESTUFFS—
12,960 pounds cochineal
91 tons dyewood
ESSENTIAL OILS—
1,250 pounds various
500 pounds various
2,940 pounds various
3,750 pounds various
800 pounds
FLOWERS—
1,900 pounds chamomile
6,000 pounds lily of the valley
GLYCERIN—
90,460 pounds
GUMS—
7,000 pounds sandarac
105,000 pounds arabic
6,500 pounds arabic

IRON OXIDE—
5,100 pounds
400 pounds
LEECHES—
200 pounds blood suckers
LIME TARTRATE—
41,200 pounds
800 pounds
10,000 pounds
10,800 pounds
MEDICINAL AND MISCELLANEOUS DRUG PREPS.—
200 pounds medicine
MYROBALANS—
200,000 pounds
250,000 pounds
OILS—
1,505 pounds creosote
850 pounds chaulmoogra
530 tons coconut
QUINODINE—
5,000 pounds
700 pounds
ROOTS—
1,080 pounds ipecac
1,300 pounds ipecac
600 pounds ipecac
SEEDS—
7,100 pounds cardamom
69,500 pounds coriander
43,100 pounds foenugreek
36,300 pounds foenugreek
28,500 pounds foenugreek

53,000 pounds coriander
130,500 pounds coriander
67,500 pounds coriander
72,000 pounds coriander
SPICES—
30,300 pounds cinnamon
66,200 pounds pepper
SHELLAC—
45,000 pounds
TALC—
80,500 pounds
TARTAR, CRUDE—
120,000 pounds
WAX—
43,500 pounds bees
59,350 pounds carnauba
80,550 pounds carnauba
59,700 pounds carnauba
538,750 pounds carnauba

Exports

ALCOHOL—
14 gallons, Guatemala
ALCOHOL, WOOD
75 gallons, Iceland
BEES WAX—
100 pounds, Brazil
CALCIUM CARBIDE—
12,700 pounds, Peru
COPPER SULPHATE—
1,173,700 pounds, Greece
CORN STARCH—
5,780 pounds, Mexico
1,000 pounds, San Domingo
240 pounds, Argentina
FLAX SEED—
105 bushels, Cuba
GLYCERIN—
284 pounds, Panama
50 pounds, Argentina

HONEY—
3,375 pounds, Scotland
HOPS—
180 pounds, Newfoundland
40 pounds, Barbados
LIME CHLORIDE—
7,200 pounds, Brazil
PEPPERMINT OIL—
2 pounds, Mexico
30 pounds, Newfoundland
PARAFFIN WAX, CRUDE—
67,169 pounds, Italy
PARAFFIN WAX, REFINED—
104,590 pounds, Guatemala
180 pounds, Newfoundland
44,800 pounds, Spain
5,000 pounds, Nicaragua
76,995 pounds, Mexico
POTASSIUM CHLORATE—
19,125 pounds, Chile
SODA, ASH—
500 pounds, Mexico
445 pounds, Colombia
SODA, CAUSTIC
54,037 pounds, Nicaragua
22 pounds, Salvador
SODA, SAL
625 pounds, Honduras
1,400 pounds, Newfoundland
SODA, SILICATE—
9,732 pounds, Peru
SULPHUR, CRUDE—
4 tons, British West Indies
10 tons, British Guiana
ZINC OXIDE—
10 pounds, Guatemala
923 pounds, Salvador
69,632 pounds, Argentina

Research Institute for Canada

OTTAWA, CANADA, Sept. 24.—The first annual report of Dr. A. B. Macallum, chairman of the Canadian Advisory Council for Scientific and Industrial Research, in addition to giving a summary of its work (some details of which have been previously published) strongly recommends the establishment at Ottawa, or some other center of a Research Institute.

The matter has been exhaustively considered by the Council and consultations have been held with the heads of various technical bureaus in Washington, as a result of which it is recommended that the proposed Institute should be organized on the lines of the Bureau of Standards at Washington or the National Physical Laboratory of Great Britain.

Attached to the Institute should be laboratories that may be at the disposal of guilds or associations for research, which may be founded by various Canadian industries, each in its own line. The report deals at some length with the details of the establishment of such an Institute and notes the important results achieved in England by means of government-assisted research, and the steps in the same direction which are being taken by the French, Japanese and Australian governments.

The Henry Bower Chemical Mfg. Company, Philadelphia, Pa., has sold a tract of land totaling 15,365 square feet, in the vicinity of its works on Gray's Ferry Road, to the Schuylkill River East Side Railroad, for a consideration of about \$11,500.

Fine Chemical Industry in England

In a lecture delivered at the recent British scientific products exhibition in London Prof. R. R. Bennett discussed the development of the fine chemical industry in Great Britain, during the war, saying in part:

"Three of the most important of the vegetable alkaloids—quinine, morphine, and strychnine—and the two most important anaesthetics—ether and chloroform—have all along been British products. In respect of these and a host of others which could be named, this country has not only been self-supporting, but in many of them has done a very considerable export business. In 1914 the manufacture of salicylates was practically a German monopoly, but in 1918 this manufacture is an established British industry. Salicylic acid and its derivatives—sodium, salicylate, methyl salicylate, salol, aspirin and such salts as calcium acetyl-salicylate—are all produced here on a commercial scale sufficiently large for present and estimated future requirements. Among other medicinal synthetic chemicals successfully manufactured during the war are benzoic acid and the benzoates, acetanilide, phenacetin, hexamine, and saccharin.

Fire, on September 20, destroyed the entire interior of Building No. 7 at the plant of the Chemical Company of America, Springfield, N. J., and a quantity of material in course of preparation for the Government. It is understood that repairs will be made at once.

Prices Current of Drugs & Chemicals, Heavy Chemicals & Dyestuffs in Original Packages

NOTICE — The prices herein quoted are for large lots in Original Packages as usually Purchased by Manufacturers and Jobbers.

In view of the scarcity of some items subscribers are advised that quotations on such articles are merely nominal, and not always an indication that supplies are to be had at the prices named.

Drugs and Chemicals

Acetanilid, C.P., bbls. bulk	lb. .71 — .72
Acetone	lb. .25 $\frac{1}{4}$ — .25 $\frac{1}{4}$
Acetphenetidin	lb. 2.90 — 3.05
*Aconitine, $\frac{1}{2}$ -oz. vials	ea. — — —
Agar Agar, See Isinglass.	
No. 1	lb. .85 — .86
No. 2	lb. .80 — .81
No. 3	lb. .75 — .76
Alcohol 188 proof	gal. — — 4.91
190 proof, U.S.P.	gal. — — 4.97
Cologne Spirit, 190 proof	gal. — — 5.06
Wood, ref. 95 p.c.	gal. 91 $\frac{1}{4}$ — 92
97 p.c.	gal. 94 $\frac{1}{4}$ — 95
Denatured, 180 proof	gal. .68 — .69
188 proof	gal. .69 — .70
Aldehyde	lb. 1.25 — 1.45
Almonds, bitter	lb. .41 — .45
Sweet	lb. .28 — .29
Meal	lb. .35 — .37
Aloin, U.S.P. powd.	lb. .96 — 1.00
Aluminum (see Heavy Chemicals)	lb. — — —
Ambergris, black	oz. 10.00 — 14.00
Grey	oz. 22.00 — 23.75
Ammonium, Acetate, cryst.	lb. .30 — .35
Benzoate, cryst. U.S.P.	lb. — — 11.00
Bichromate, C. P.	lb. — — 1.20
Bromide, gran. bulk	lb. .75 — .76
Carb. Dom. U.S. Kegs, powd.	lb. .14 — 1.45
Hypophosphite	lb. — — 2.15
Iodide	lb. — — 4.20
Molybdate, Pure	lb. — — 7.00
Muriate, C. P.	lb. — — .45
Nitrate, cryst. C. P.	lb. .25 — .26
Gran.	lb. — — .54
Oxalate, Pure	lb. — — 1.15
Persulphate	lb. — — 1.25
Phosphate (Dibasic)	lb. .50 — .60
Salicylate	lb. 1.60 — 1.63
Amyl Acetate, bulk, drums.gal.	5.30 — 5.35
Antimony Chlor. (Sol. butter of Antimony)	lb. .18 — .20
Needle powder	lb. .13 — .14
Sulphite, 16-17 per cent. free sulphur	lb. .35 — .38
Antipyrine, bulk	19.50 — 20.25
Apomorphine Hydrochloride	oz. — — 31.20
Areca Nuts	lb. .34 — .39
Powdered	lb. .16 — .45
Argols	lb. .63 — .66
*Arsenic, red	lb. .10 — .11
+White	lb. — — 47.50
Atropine, Alk. U.S.P., 1-oz. v. oz.	— — —
Sulphate, U.S.P., 1-oz. v. oz.	— — — 37.50
Balm of Gilead Buds	lb. .70 — .85
*Barium Carb. prec. pure	lb. — — —
*Chlorate, pure	lb. .50 — .60
Bay Rum, Porto Rico	gal. 3.45 — 3.65
St. Thomas	gal. 3.75 — 3.90
Benzaldehyde (see bitter oil of almonds)	
Benzol, See Coal Tar Crudes	
Berberine, Sulphate, 1-oz.c.v.oz.	2.50 — 3.00
Beta Naphthol (see Intermediates)	
Bismuth, Citrate, U.S.P.	lb. — — 3.50
Salicylate	lb. — — 3.35
Subcarbonate, U.S.P.	lb. — — 3.50
Subgallate	lb. — — 3.50
Subiodide	lb. — — 5.60
Subnitrate	lb. — — 3.30
Tannate	lb. — — 3.15
Borax, in bbls., crystals	lb. .07 $\frac{1}{4}$ — .08 $\frac{1}{4}$
Crystals, U.S.P., Kegs	lb. .08 $\frac{1}{4}$ — .09
Bromine, tech. bulk	lb. .75 — .76

*Nominal.

†Fixed Government price.

*Nominal.

WHERE TO BUY

Conserve:

GLYCERINE

By using:

NULOMOLINE "T.P."

And save money.

All users of Glycerine should study the many advantages of Nulomoline "T.P."

Manufactured by:

THE NULOMOLINE COMPANY

Distributed by:

W. J. BUSH & CO., Inc.
100 William Street, New York City

Burgundy Pitch	lb. .04 $\frac{1}{2}$ — .05
*Imported	lb. — — —
Cadmium Bromide, crystals	lb. 1.75 — 1.80
Iodide	lb. — — 4.40
Metal sticks	lb. 1.50 — 1.60
Hydrobromide	lb. 10.70 — 12.00
Citrated, U.S.P.	lb. 8.00 — 8.05
Phosphate	lb. 14.00 — 15.00
Sulphate	lb. 15.00 — 16.00
Calcium Glycerophosphate	lb. 1.80 — 1.85
*Hypophosphite, 100 lbs.	lb. 1.00 — 1.05
Iodide	lb. — — 4.10
Phosphate, Precip.	lb. .21 — .23
Sulphocarbolate	lb. 1.02 — 1.07
Calomel, see Mercury	
Camphor, Amer. ref'd bbls. bk. lb.	— — 124 $\frac{1}{2}$
Square of 4 ounces	lb. — — 125 $\frac{1}{2}$
16's in 1-lb. carton	lb. — — 1.28
24's in 1-lb. carton	lb. — — 1.27
32's in 1-lb. carton	lb. — — 1.29
Cases of 100 blocks	lb. — — 1.25
Japan, refined, 2 $\frac{1}{2}$ -lb. slabs, lb.	— — 1.25
Monobromated, bulk	lb. 3.75 — 3.80
Cantharides, Chinese	lb. .99 — 1.00
Powdered	lb. 1.15 — 1.20
Russian	lb. 3.95 — 4.20
Powdered	lb. 4.55 — 4.65
Carbon disulphide, tech 500 lbs. bulk	lb. .08 $\frac{1}{2}$ — .09
Casein, C. P.	lb. .45 — .49
Cerium Oxalate	lb. .60 — .62
Chalk, prec. light, English	lb. .04 $\frac{1}{2}$ — .04 $\frac{1}{4}$
Heavy	lb. .03 $\frac{1}{4}$ — .05
Chloral Hydrate, U. S. P. crystals, bottles incl'd.	lb. 1.58 — 1.60
100 lb. lots	lb. — — 1.06
Charcoal Willow, powdered	lb. .05 $\frac{1}{2}$ — .07 $\frac{1}{2}$
Chlorine, liquid	lb. .15 — .24
Chloroform, drums, U. S. P.	lb. .63 — .70
Chrysarobin, U. S. P.	lb. 5.30 — 5.40
Cinchonidin, Alk. crystals	oz. — — 1.05
Cinchonine, Alk. crystals	oz. — — .61
Sulphate	oz. — — .35
Cinnabar	lb. — — 1.45
Civet	oz. 2.30 — 2.70
Cobalt, pow'd (Fly Poisen)	lb. .45 — .49
Oleate	oz. .55 — .56
Cocaine, Hydrochl. gran.	oz. 11.00 — 11.25
cryst. bulk	oz. 11.25 — 11.50
Cocoa Butter, bulk	lb. .30 — .32
Cases, fingers	lb. .40 — .41
Cocaine, Alk. Bulk	oz. — — 10.30
Nitrate, Bulk	oz. — — 9.45
Phosphate, Bulk	oz. — — 7.75
Sulphate, Bulk	oz. — — 8.25
Collodion, U. S. P.	lb. .41 — .45
Colocynth, Apples, Trieste	lb. .30 — .35
Pulp, U.S.P.	lb. .45 — .49
Spanish Apples	lb. .39 — .40
Copper Chloride, pure cryst.	lb. — — 70
20 p.c.	lb. — — 1.45
Corrosive Sublimate, see Mercury	
Cotton Soluble	lb. .78 — 1.00
Comarulin, refined	lb. 32.00 — 34.00
Cream of Tartar, cryst. U.S.P.	lb. — — .69
Powdered, 99 p.c.	lb. — — .68 $\frac{1}{2}$
Cresote, U.S.P.	lb. 1.85 — 1.95
"Carbonate	lb. 26.00 — 27.50
Cresol, U.S.P.	lb. .18 — .20
Cuttlefish Bones, Trieste	lb. .65 — .66
Jewelers large	lb. 1.70 — 1.75
Small	lb. 1.68 — 1.72
French	lb. .44 — .46
Dover's Powder, U.S.P.	lb. 2.90 — 3.00
Dragon's Blood, Mass.	lb. .34 — .36
Reeds	lb. 4.90 — 5.20
Emetine, Alk., 15 gr. vials	ea. — — 2.75
Hydrochloride, U.S.P. 15 gr. vials	ea. — — 1.85
Epsom Salts (see Mag. Sulph.)	
Ergot, Russian	lb. 1.70 — 1.80
Spanish	lb. 1.70 — 1.80
ether, U.S.P., 1900	lb. — — .39
Washed	lb. .31 — .32
U.S.P., 1880	lb. .39 — .40
Eucalyptol	lb. 1.35 — 1.45
Formaldehyde	lb. — — 1.04
Gelatin, silver	lb. 1.40 — 1.45
"Gold"	lb. — — —
Glycerin, C. P. bulk	lb. — — —
Drums and bbls., added	lb. .61 — .61 $\frac{1}{2}$
C.P. in cans	lb. .63 — .63 $\frac{1}{2}$
Dynamite, drums included	lb. .60 — .60 $\frac{1}{2}$
Saponification, loose	lb. .41 $\frac{1}{2}$ — .42
Soap, Lye, loose	lb. .37 $\frac{1}{2}$ — .38
Scents of Paradise	lb. 1.40 — 1.50
Guaiacol, liquid	lb. 19.90 — 22.00
Guarana	lb. .95 — 1.00
Haarlem Oil, bottles	gross 8.45 — 9.00
Hexamethylenetetramine	lb. 1.10 — 1.15
Hops, N. Y., 1917 prime	lb. .45 — .50
Pacific Coast, 1917 Prime	lb. .23 — .24
Hydrogen Peroxide, U.S.P., 10 gr. lots	
4-oz. bottles	gross — — 7.50
12-oz. bottles	gross — — 16.50
16-oz. bottles	gross — — 20.00
Hydroquinone, bulk	lb. — — 2.75
Ichthyol	lb. — — —
Iodine, Resublimed	lb. 4.25 — 4.30
Crystals	lb. — — 5.55
Iron Citrate, U.S.P.	lb. — — 1.15
Phosphate, U.S.P.	lb. — — 1.09
Pyrophosphate, U.S.P.	lb. — — 1.05
*Isinglass, American	lb. .80 — .81
Russian	lb. 7.50 — 7.80
See Agar Agar	
Kamala, U.S.P.	lb. 3.20 — 3.40
Kola Nuts, West Indies	lb. .25 — .28
Lanolin, hydros. cans U.S.P.	lb. .39 — .43
Anhydrous, cans	lb. .49 — .51
Lead Iodide, U.S.P.	lb. — — 2.95
Licorice, Mass. Syrian	lb. .29 — .30
"Sticks, bbls. Corigliano	lb. .49 — .50
Lupulin	lb. .95 — 3.00
Lycopodium, U.S.P.	lb. 1.65 — 1.70
Magnesium Carb. U.S.P.	lb. .20 — .21
Glycerophosphate	lb. — — 4.55
Hypophosphite	lb. 1.65 — 1.70
Iodide	lb. — — 4.85
Oxide, tins light	lb. — — 1.10
Peroxide, cans	lb. — — 2.15
Salicylate	lb. 1.30 — 1.37
Sulphate, Epsom Salts, tech	100 lbs. 3.37 $\frac{1}{2}$ — 3.45
	100 lbs. 3.62 $\frac{1}{2}$ — 3.87
Manganese, Glycerophosphate	lb. 4.50 — 4.70
Hypophosphite	lb. 1.65 — 1.70
Iodide	lb. — — 4.85
Peroxide	lb. — — 4.85
Sulphate, crystals	lb. .60 — .67
Manna, large flake	lb. .83 — 1.00
Small flake	lb. .67 — .69
Menthol, Japanese	lb. 4.45 — 4.70
Mercury, flasks, 75 lbs.	lb. 1.25 — 1.27
Bisulphate	lb. — — 1.53
Blue Mass	lb. — — .95
Powdered	lb. — — .97
Blue Ointment, 30 p.c.	lb. — — .93
50 p.c.	lb. — — 1.30
*Nominal.	
†Govt. fixed price.	

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Mercury, Calomel, Amer.	lb.	—	2.00
Corrosive Sublimate cryst.	lb.	—	1.84
Powdered, Granular	lb.	—	1.79
Iodide, Green	lb.	—	4.25
Red	lb.	—	4.35
Yellow	lb.	—	4.25
Red Precipitate	lb.	—	2.19
Powdered	lb.	—	2.26
White Precipitate	lb.	—	2.29
Powdered	lb.	—	2.34
Methylene Blue, medicinal	lb.	15.00	—17.00
Milk, powdered	lb.	16	—19
Mirbane Oil, refined, drums	lb.	17½	—19½
Morphine, Acet. bulk	oz.	—	12.80
Sulphate, bulk	oz.	—	11.80
Diacetyl, Hydrochloride, 5-oz. cans	oz.	—	15.90
Moss, Iceland	lb.	.23	—.24
Irish	lb.	11½	—13
Musk, pods, Cab	oz.	12.00	—12.25
Tonquin	oz.	24.00	—25.00
Grain Cab	oz.	18.50	—18.95
Tonquin	oz.	38.00	—39.00
Druggists	oz.	—	—
*Synthetic	lb.	30.00	—30.10
Naphthalene, See Coal Tar Products.	lb.	—	—
Nickel and Ammon. Sulphate	lb.	—	22
Sulphate	lb.	.27	—.29
Novocain (See Procaine)	lb.	—	—
Nux Vomica, whole	lb.	13	—14
Powdered	lb.	16	—18
*Opium, cases, U.S.P.	lb.	—	21.50
Granular	lb.	—	24.50
Powdered, U.S.P.	lb.	—	23.50
Oxgall, pure U.S.P.	lb.	1.50	—1.55
Paraffin	lb.	4.70	—5.20
Paraffin White Oil, U.S.P. gal.	gal.	3.10	—3.60
Paris Green, kegs	lb.	40	—42
Petrolatum, light amber bbls.	bbl.	.05	—.07
Cream White	lb.	.07	—.08
Lily White	lb.	.13	—.14
Snow White	lb.	.15	—.15½
Phenolphthalein	lb.	5.50	—6.00
*Phosphorus, yellow	lb.	—	—
Red	lb.	1.70	—1.80
Pilocarpine	oz.	16	—20
Piperin	lb.	13.00	—18.00
Poppy Heads	lb.	1.45	—1.50
Potassium acetate	lb.	1.50	—1.55
Bicarb.	lb.	.70	—.75
Bisulphite	lb.	.45	—.60
C. P.	lb.	.75	—.85
Bromide, (Bulk, gran.)	lb.	1.25	—1.26
Chromate, crystals, yellow, tech. 1-lb. s. b. 10	lb.	—	1.05
Citrate, bulk	lb.	—	1.60
Glycerocephosphate, bulk	oz.	—	1.45
Hypophosphate, bulk	oz.	2.15	—2.20
Iodide, bulk	lb.	—	3.75
Lactophosphate	oz.	—	2.25
Permanganate, U.S.P.	lb.	1.75	—1.90
Salicylate	lb.	2.00	—3.75
Sulphate, C.P.	lb.	1.11	—1.16
Tartrate, powdered	lb.	1.31	—1.32
Procaine, oz. bottles	oz.	7.00	—7.50
5 gr. bottles	oz.	1.50	—1.60
Quinine, Bisulphate, 100 oz. tins	oz.	—	.90
Sulphate, 100 oz. tins	oz.	—	.90
50-oz. tins	oz.	—	.91
25-oz. tins	oz.	—	.92
5-oz. tins	oz.	—	.94
1-oz. tins	oz.	—	.98
Second hands, Java	oz.	.91	—.92
Second hands, American	oz.	—	1.00
*Amsterdam	oz.	—	—
*German	oz.	—	—
*Java	oz.	—	—
Quinidine Alk. crystals, tins oz.	oz.	—	1.06
Sulphate, tins	oz.	—	.70
Resorcin crystals, U.S.P.	lb.	7.75	—7.95
Rochelle Salt, crystals, bxs. lb.	lb.	—	.47
Powdered, bbls.	lb.	—	.46½
Saccharin, U.S.P., soluble	lb.	26.50	—27.00
U.S.P., Insoluble	lb.	25.50	—26.00
Salicin, bulk	lb.	30.00	—30.50
Salol, U.S.P., bulk	lb.	—	1.50
Sandalwood	lb.	—	.60
Ground	lb.	—	.65
Santonin, cryst., U.S.P.	lb.	47.00	—47.50
Powdered	lb.	48.00	—49.00
Scammony, resin	lb.	2.95	—3.20
Powdered	lb.	3.05	—3.30
Seiditz Mixture, bbls.	lb.	—	.36
Silver Nitrate, 500-oz. lots	oz.	—	.63½
Soap, Castile, white, pure. lb.	lb.	.17	—.18
Marseilles, white	lb.	—	.17
Green, pure	lb.	—	.15
Ordinary	lb.	.14	—.15
Sodium, Acetate, U.S.P. gran.	lb.	.25	—.29
Benzolate, gran. U.S.P.	lb.	2.75	—2.90
Bicarb. U.S.P. powd. bbls.	lb.	.084	—.08
Bromide, U.S.P., bulk	lb.	.63	—.66
*Nominal.	lb.	—	—

WHERE TO BUY

POTASSIUM CARBONATE

all grades

SALICYLIC ACID, U.S.P.

Spot and Future

THE W. K. JAHN COMPANY

13-21 Park Row . N. Y. City

Sodium, Cacodylate	oz.	2.50	—3.50
Chlorate, U.S.P. 8th Rev.	crystals, c. b. 10	lb.	—
Granular, c. b. 10.	lb.	—	.52
Citrate, U.S.P. cryst.	lb.	—	.67
Granular, U.S.P.	lb.	—	.77
Glycerocephosphate, crystals	lb.	2.20	—2.25
Hypophosphate, U.S.P.	lb.	1.10	—1.15
Iodide, bulk	lb.	—	.30
Phosphate, U.S.P., gran.	lb.	—	.13
Recryst.	lb.	.17	—.18
Dried	lb.	.25	—.26
Salicylate, U.S.P.	lb.	.92	—1.00
Sulph. (Glauber's Salt)	lb.	—	.12
Spermaceti, blocks	lb.	.27	—.28
Spirit Ammonia, U.S.P.	lb.	.45	—.55
Aromatic	U.S.P.	lb.	.47
Nitrous Ether, U.S.P.	lb.	.48	—.49
Ether Comp.	lb.	—	1.65
Storax, liquid cases	lb.	.30	—4.60
Stronitum Bromide, bulk	lb.	.75	—.76
Iodide, bulk	lb.	—	.35
Nitrate	lb.	.24	—.29
Salicylate, U.S.P.	lb.	1.25	—1.30
Terpineh Alkd., cryst.	oz.	—	.80
Acetate	oz.	—	1.80
Nitrate	oz.	—	1.80
Sulphate, crystals, bulk	oz.	—	1.40
Sugar of Milk, powdered	lb.	.56	—.58
Sulphonated, 100-oz. lots	lb.	1.18	—1.50
Sulphonethylmethane, U.S.P.	lb.	13.00	—14.00
Sulphonomethane, U.S.P.	lb.	16.00	—16.75
Sulphur, bbls.	—	100 lbs.	—
Flour com'g bags	—	100 lbs.	—
Flowers	—	100 lbs.	4.05
Tamarinds, bbls.	lb.	11½	—13
Kegs	per keg	4.95	—6.50
Tartar Emetic, tech.	lb.	.67	—6.74
U. S. P.	lb.	.73	—.73½
Terpin Hydrate	lb.	.49	—.50
Thymol, crystals	U.S.P.	lb.	13.00
Iodide, U.S.P., bulk	lb.	16.00	—17.00
Tin, bichloride	bbls.	.28	—.29
Oxide, 500 lb. bbls.	lb.	.90	—.95
Toluol. See Coal Tar Crudes.	—	—	—
*Turpentine, Venice, True	lb.	4.90	—5.00
Artificial	lb.	.07	—.08
Spirits, see Naval Stores.	—	—	—
Vanillin	oz.	.80	—.84
Witch Hazel Ext., dble dist.	oz.	—	—
bbl.	gal.	1.18	—1.23
Zinc Carbonate	lb.	.21	—.23
Chloride	lb.	.14½	—.15
Iodide, bulk	lb.	—	4.00
Metallic, C. P.	lb.	.45	—.75
Oxide, U.S.P., bbls.	lb.	.34	—.36
Acids			
Acetic, 28 p.c.	lb.	Nominal	—
*Glacial	lb.	19½ Gov. pr.	—
Acetyl-salicylic	lb.	2.50	—2.75
*Benzoin, from gum	lb.	—	—
U.S.P. ex toluol.	lb.	2.80	—2.90
Boric, cryst.	bbls.	1.34	—1.35
Powdered, bbls.	lb.	.13½	—.15
Butyric, Tech., 60 p.c.	lb.	1.45	—1.55
Camphoric	lb.	4.30	—4.48
*Carbolic crys., U.S.P., drs. lb.	lb.	.41	—.43
1-lb. bottles	lb.	.52½	—.53
5-lb. bottles	lb.	.51	—.52
50 to 100-lb. tins	lb.	.48	—.50
Chromic, U.S.P.	lb.	1.25	—1.50
Chrysophanic	lb.	6.20	—6.33
Citric, crystals	bbls.	.82	—.82½
Powdered	lb.	.82½	—.83
Second hands	lb.	.92	—.92½
Cresylic, 95-100 p.c.	gal.	1.10	—1.15
Formic, 75 p.c. tech.	lb.	.36½	—.37
Gallic, U.S.P., bulk	lb.	1.55	—1.65
Glycerophosphoric	lb.	3.45	—5.00
Hydroiodide, sp. f. 1,150	oz.	.25	—.30
Hydrobromic, Conc.	lb.	2.40	—2.45
Hydrocyanic, 2 p.c. U.S.P.	lb.	.18	—.20
Hydrofluoric, 48 p.c. C.P.	lb.	1.20	—1.25
*Nominal.	lb.	—	—
Hydrosilicofluoric, 10 p.c. tech.	lb.	.40	—.45
20 p.c. tech.	lb.	.50	—.60
Hypophosphorous, 50 p.c.	lb.	.65	—.70
U. S. P. 10 p.c.	lb.	2.15	—2.25
Lactic, U.S.P. VIII	lb.	2.25	—2.40
U. S. P. IX	lb.	6.90	—7.40
Molybdc.	C.P.	6.90	—7.40
Muriatic, 20 deg. carboys	lb.	Nominal	—
Nitric, 42 deg. carboys	lb.	0.95 Gov. pr.	—
Nitro Muriatic	lb.	.20	—.23
Oleic, purified	lb.	.23	—.28
Oxalic, conc.	bbls.	.45	—.47
*Picric, kegs	lb.	—	—
Phosphoric, 85-88 p.c. syrupy	lb.	—	—
U. S. P.	50 p.c. tech.	lb.	.45
Pyrogallic, resublimed	lb.	.35	—.40
Crystals, bottles	lb.	3.20	—3.45
Pyrolineous, purified	lb.	2.90	—3.10
Technical	gal.	.06	—
Salicylic, Bulk, U.S.P.	lb.	.90	—1.00
Stearic, triple pressed	lb.	.26	—.28
Sulphuric, C. P.	lb.	.07	—.08
66 deg. tech. f.o.b. wks.	ton	28.00	Gov. pr.
*Sulphurous	lb.	—	—
Tannic	lb.	1.40	—1.50
U.S.P., bulk	lb.	1.48	—1.52
Tartaric Crystals, U.S.P.	lb.	.86	—.93
Powdered, U.S.P.	lb.	.85	—.92
Trichloroacetic, U.S.P.	lb.	4.40	—4.50
Essential Oils			
Imond, bitter	lb.	12.75	—13.00
Artificial, chlorine traces	lb.	5.20	—5.30
Free from chlorine	lb.	5.35	—5.55
Amber, crude	lb.	2.40	—2.50
Rectified	lb.	2.75	—2.85
Anise	lb.	1.10	—1.30
Bay	lb.	3.00	—3.10
Bergamot	lb.	5.75	—5.85
*Synthetic	lb.	3.50	—3.75
Bois de Rose	lb.	5.50	—7.50
Cade	lb.	1.25	—1.30
Camphor, art.	lb.	—	—
Japanese, white	lb.	.23	—.25
Caraway, Rectified	lb.	8.25	—8.30
Cassia, 75-80 p.c. tech.	lb.	2.25	—2.30
Lead, Free	lb.	2.45	—2.55
Redistilled, U.S.P.	lb.	2.90	—3.15
Cedar Leaf	lb.	1.25	—1.30
Cedar Wood	lb.	.18	—.20
Cinnamon, Ceylon, heavy	lb.	22.00	—23.00
Citronella, Ceylon, drama.	lb.	.56	—.58
Java	lb.	.75	—.77
Claves, can	lb.	3.25	—3.30
Bottles	lb.	3.35	—3.40
Coimbra	lb.	.90	—1.10
Coriander	lb.	28.00	—29.00
Cubes	lb.	7.90	—8.10
Cumin	lb.	11.00	—11.25
Erigeron	lb.	3.25	—3.35
Eucalyptus, Australian	lb.	.65	—.70
Fennel, sweet	lb.	4.00	—4.15
Geranium, Rose Algerian	lb.	10.50	—10.75
Bourbon (Reunion)	lb.	9.50	—9.70
Turkish	lb.	4.75	—5.00
Ginger	lb.	7.75	—7.80
Gingergrass	lb.	—	—
Hemlock	lb.	1.25	—1.30
Juniper Berries, rect.	lb.	11.25	—11.50
Twice rect.	lb.	12.75	—13.00
Wood	lb.	2.00	—2.15
Lavender Flowers	lb.	5.65	—5.75
Garden	lb.	1.10	—1.15
Spike	lb.	1.45	—1.55
Lemon, U.S.P.	lb.	1.25	—1.35
Lemongras, Native	lb.	1.40	—1.45
Limes, Expressed	lb.	5.50	—5.75
Distilled	lb.	2.25	—2.30
Linaloe	lb.	5.00	—5.10
Mace, distilled	lb.	2.40	—2.50
*Mustard, natural	lb.	—	—
Artificial	lb.	22.00	—22.50
Neroli, bigarade	lb.	102.00	—103.00
Petale	lb.	95.00	—100.00
Artificial	lb.	18.75	—25.00
Nutmeg	lb.	2.40	—2.45
Orange, bitter	lb.	2.35	—2.50
Sweet, West Indian	lb.	1.90	—1.95
Italian	lb.	2.60	—3.00
*Orris Concrete	oz.	—	—
Origanum, Imitation	lb.	.40	—.50
Patchouli	lb.	29.00	—31.00
Pennyroyal, domestic	lb.	1.75	—1.85
Imported	lb.	1.20	—1.30
Peppermint, tins	lb.	4.70	—5.00
Bottles	lb.	4.95	—5.45
Bulk	lb.	4.40	—4.50
*Nominal.	lb.	—	—

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Petit Grain, So. America	lb.	3.50	—	3.60
French	lb.	8.50	—	8.65
Pinus Sylvestrus	lb.	—	—	6.50
Pumilio	lb.	—	—	6.00
Rose, French	oz.	25.00	—	28.00
Synthetic, red	lb.	—	—	36.00
*Safrol	lb.	.45	—	.47
Sandalwood, East India	lb.	13.50	—	13.60
*Sassafras, natural	lb.	2.20	—	2.40
Artificial	lb.	.41	—	.42
Savin	lb.	7.00	—	7.25
Spruce	lb.	1.25	—	1.35
*Spearmint	lb.	—	—	3.50
Tansy, Amer.	lb.	4.50	—	4.70
Thyme, red, French	lb.	2.00	—	2.20
White, French	lb.	2.00	—	2.10
*Wine, Ethereal, light	lb.	—	—	—
Wintergreen, leaves, true	lb.	5.00	—	5.20
Birch, Sweet	lb.	4.00	—	4.25
Synthetic, U.S.P., bulk	lb.	.85	—	1.00
Wormseed, Balti.	lb.	—	—	12.00
Wormwood, Dom.	lb.	5.50	—	5.60
Ylang Ylang, Bourbon	lb.	12.00	—	15.00
Manila	lb.	27.00	—	29.00
Artificial	lb.	10.00	—	10.50

OLEORESINS

*Aspidium (Malefern)	lb.	17.50	—	18.00
Capicum, 1-lb. bottles	lb.	4.75	—	4.85
Cubeb	lb.	7.00	—	7.25
Ginger	lb.	3.75	—	3.88
*Parsley Fruit (Petroselinum)	lb.	6.75	—	7.50
Pepper, black	lb.	—	—	7.00
*Malefern	lb.	12.00	—	12.20
Mullein (so-called)	lb.	5.00	—	5.25
*Orris, domestic	lb.	—	—	20.00
Imported	lb.	—	—	30.00

Crude Drugs

BALSAMS

Copaiba, Para	lb.	.59	—	.64
South American	lb.	.77	—	.79
Fir, Canada	lb.	5.90	—	6.00
Oregon	gal.	1.74	—	1.79
Peru	lb.	3.30	—	3.40
Tolu	lb.	1.02	—	1.08

BARKS

Angostura	lb.	.32	—	.34
Basswood Bark, pressed	lb.	.18	—	.21
Blackhawk, of root	lb.	.41	—	.42
of Tree	lb.	.29	—	.32
Buckthorn	lb.	.23	—	.24
Calisaya	lb.	.74	—	.84
Cascara Sagrada	lb.	.18	—	.19
Cascarilla, quills	lb.	.20	—	.23
Siftings	lb.	11% [—]	—	13% [—]
Chestnut	lb.	.10	—	.10
Cinchona, red quills	lb.	.89	—	1.20
Broken	lb.	.84	—	.95
*Yellow "quills"	lb.	—	—	—
Broken	lb.	.69	—	.74
*Loxa, pale, bs.	lb.	—	—	—
Powdered, boxes	lb.	—	—	—
*Maracaibo, yellow, powd.	lb.	—	—	—
Condurango	lb.	.12	—	.14
Cotton Root	lb.	.14	—	.15
Cramp (true)	lb.	.50	—	.52
Cramp (so-called)	lb.	.11	—	.12
Dogwood, Jamaica	lb.	0.08% [—]	—	.10
Elm, grinding	lb.	.10	—	.11
Select bds.	lb.	.19	—	.20
Ordinary	lb.	.09	—	.10
Hemlock	lb.	.08	—	.08% [—]
Lemon Peel	lb.	.09% [—]	—	.10% [—]
Mezereon	lb.	.22	—	.23
Oak, red	lb.	.06% [—]	—	.07
White	lb.	.04% [—]	—	.05
Orange Peel, bitter	lb.	.06	—	.07
Malaga, sweet	lb.	.11% [—]	—	.12% [—]
Trieste, sweet	lb.	.13	—	.13% [—]
Prickly Ash, Southern	lb.	.13% [—]	—	.14% [—]
Northern	lb.	—	—	—
Pomegranate of Root	lb.	.39	—	.42
of Fruite	lb.	.30% [—]	—	.31
Sassafras, ordinary	lb.	.13	—	.14
Select	lb.	.23	—	.24
Simaruba	lb.	.59	—	.63
Soap, whole	lb.	.11	—	.12
Cut	lb.	.18	—	.19
Crushed	lb.	.17	—	.18
Wahoo, of Root	lb.	.42	—	.43
of Tree	lb.	.23	—	.24
Nominal	lb.	—	—	—

WHERE TO BUY

Antoine Chiris Co. NEW YORK IMPORTERS & MANUFACTURERS ESSENTIAL OILS SYNTHETIC CHEMICALS

Fritzsch Brothers New York ESSENTIAL - OILS

Willow, Black	lb.	.08	—	.09
White	lb.	.16	—	.17
White Pine	lb.	.07	—	.08
White Poplar	lb.	.04	—	.05
Wild Cherry	lb.	.09% [—]	—	.10
Witch Hazel	lb.	.07	—	.08

BEANS

Calabar	lb.	.59	—	.62
St. Ignatius	lb.	.23	—	.24
St. John's Bread	lb.	.30	—	.32
Tonka, Angostura	lb.	1.00	—	1.10
Para	lb.	.65	—	.68
Surinam	lb.	.69	—	.74
Vanilla, Mexican, whole	lb.	4.45	—	.59
Cuts	lb.	2.95	—	3.15
Bourbon	lb.	2.20	—	3.00
South American	lb.	2.95	—	3.20
Tahiti, White Label	lb.	1.65	—	1.70
Green Label	lb.	1.55	—	1.60

FLOWERS

Arnica	lb.	.91	—	.95
Powdered	lb.	1.01	—	1.05
Borage	lb.	.59	—	.69
Calendula Petals	lb.	2.45	—	3.15
Chamomile, German	lb.	—	—	—
*Hungarian type	lb.	.46	—	.49
Roman	lb.	.92	—	1.00
*Spanish	lb.	.42	—	.50
Clover Tops	lb.	.20	—	.21
Dogwood	lb.	.15	—	.16
Elder	lb.	.29	—	.31
Insect, open	lb.	.29	—	.33
Closed	lb.	.38	—	.39
*Powd. Flowers and stems	lb.	.32	—	.34
Powd. Flowers	lb.	.33	—	.35

GUMS

Aloes, Barbados	lb.	1.08	—	1.13
Cape	lb.	1.8% [—]	—	.19
Curacao, cases	lb.	.09	—	.09% [—]
*Socotrine, whole	lb.	.74	—	.79
Valencia	lb.	.38	—	.40
Tilia (see Linden)	lb.	15.45	—	15.70

Ammoniac, tears	lb.	1.44	—	1.48
Powdered	lb.	1.49	—	1.53
*Arabic, firsts	lb.	.50	—	.51
"Seconds	lb.	.29	—	.30
Sorts Amber	lb.	.34	—	.36
Euphorium	lb.	1.00	—	1.15
Galbanum	lb.	.23	—	.30
Gamboge	lb.	1.85	—	1.45
Hemlock	lb.	.17	—	.17
Kino	lb.	.82	—	.89
Mastic	lb.	.49	—	.59
Myrrh, Select	lb.	.75	—	.80
Sorts	lb.	.70	—	.78
Olibanum, siftings	lb.	.60	—	.65
Tears	lb.	.15	—	.17
Sandarac	lb.	.71	—	.72
Senegal, picked	lb.	.34	—	.39
Sorts	lb.	.28	—	.30
Spruce	lb.	.63	—	.72
Thus, per bbl.	lb.	280	—	13.00
*Tragacanth, Aleppo first	lb.	2.75	—	2.90
"Seconds	lb.	2.50	—	3.20
"Thirds	lb.	2.75	—	2.95
*Turkey, firsts	lb.	—	—	—
"Seconds	lb.	—	—	—
"Thirds	lb.	—	—	—

LEAVES AND HERBS

Aconite	lb.	.34	—	.40
Balmony	lb.	.11	—	.13
Bay, true	lb.	.95	—	1.40
Belladonna	lb.	.17	—	.19
Boneset, leaves and tops	lb.	.22	—	.245
Buchu, short	lb.	.22	—	.25
Long	lb.	.22	—	.25
Cannabis, true, imported	lb.	.34	—	.35
American	lb.	.65	—	.85
Catnip	lb.	.10	—	.12
Chestnut	lb.	.06	—	.07
Chiretta	lb.	.39	—	.40
Coca, Huanuco	lb.	—	—	—
*Truxillo	lb.	.54	—	.58
Coltsfoot	lb.	.20	—	.22
*Conium	lb.	—	—	—
Corn Silk	lb.	.10% [—]	—	.11% [—]
Damiana	lb.	.15	—	.16
Deer Tongue	lb.	.20	—	.21
Digitalis, Domestic	lb.	.36	—	.39
Imported	lb.	.46	—	.49
Eucalyptus	lb.	.08	—	.09
Euphorbia Pilulifera	lb.	.18	—	.19
Grindelia Robusta	lb.	.10% [—]	—	.13
*Henbane, German	lb.	—	—	—
"Russian	lb.	—	—	—
Domestic	lb.	1.25	—	1.30
Henna	lb.	.30	—	.31
Horehound	lb.	.23	—	.24
Jaborandi	lb.	.29	—	.30
Laurel	lb.	.12% [—]	—	.12% [—]
Life Everlasting	lb.	.10	—	.11
Liverwort	lb.	.29	—	.34
Lobelia	lb.	.09	—	.10
Matico	lb.	.34	—	.35
*Marjoram, German	lb.	—	—	—
"French	lb.	—	—	—
Motherwort herb	lb.	.15	—	.16
Patchouli	lb.	.76	—	.83
Pennyroyal	lb.	.17% [—]	—	.19
Peppermint, American	lb.	.26	—	.29
Pichi	lb.	.09% [—]	—	.11% [—]
*Prince's Pine	lb.	.31	—	.32
Plantain	lb.	.12	—	.14
*Pulsatilla	lb.	.560	—	.570
Queen of the Meadow	lb.	.10	—	.11
Rose, red	lb.	.125	—	.128
Rosemary	lb.	.39	—	.44
Rue	lb.	.14	—	.15
*Sage, Austrian, stemless	lb.	.27	—	.28
"Grinding	lb.	—	—	—
Greek, stemless	lb.	.27	—	.28
Spanish	lb.	.19	—	.19% [—]
Savory	lb.	.25	—	.26
Senna, Alexandria, whole	lb.	.14	—	.19
Half Leaf	lb.	.84	—	.90
Siftings	lb.	.34	—	.40
Powdered	lb.	.40	—	.42
Tinnevelly	lb.	.13	—	.20
Pods	lb.	.15	—	.18
Skullcap, Western	lb.	.16	—	.18
*Nominal	lb.	—	—	—

*Lava
*Lady
Licorice
Senna
Spanish
*Pomegranate
Pellitory
Pink
Pleurisy
Poke
Rhubarb
Chamomile
Cinnamon
Hibiscus
Sarsaparilla
American
Mexican
Seneca
Senna
*Nominal

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Spearmint American	lb.	.19½	.20½
Squaw Vine	lb.	.26	.30
Stramonium	lb.	.18	.19
Tansy	lb.	.10	.11
Thyme, Spanish	lb.	.11	.11½
*French	lb.	.14½	.14½
Uva Ursi	lb.	.18	.19
Witch Hazel	lb.	.06½	.08
Wormwood imported	lb.	.14	.17
Yerba Santa	lb.	.08½	.09½

ROOTS

Aconite, U.S.P.	lb.	.43	.50
Powdered	lb.	.48	.55
German	lb.	—	—
*Powdered	lb.	—	—
*Alkanet	lb.	2.20	2.40
Althea, cut	lb.	.75	.79
Whole	lb.	.33	.35
Angelica American	lb.	.39	.45
Imported	lb.	.59	.69
Arnica	lb.	.80	.95
Arrowroot, American	lb.	.24	.25
Bermuda	lb.	.54	.59
St. Vincent	lb.	.39	.44
Bamboo Brier	lb.	.04	.05
Bearfoot	lb.	.09	.10
Belladonna	lb.	2.45	2.60
Powdered	lb.	2.50	2.70
Berberis, Aquifolium	lb.	.19	.20
Beth	lb.	.13	.14
Blood	lb.	.39	.41
Blueflag	lb.	.35	.36
Bryonia	lb.	.29	.30
*Burdock, Imported	lb.	.16	.17
American	lb.	.15	.16
Calamus, bleached	lb.	—	1.35
Unbleached, natural	lb.	.16	.17
Cohosh, black	lb.	.10	.11
Blue	lb.	.10	.10½
Colchicum	lb.	2.70	2.75
Colombo, whole	lb.	.29	.30
Comfrey	lb.	.22	.23
Culver's	lb.	.14	.15
Cranebill see Geranium	lb.	—	—
Dandelion, English	lb.	.29	.30
American	lb.	.28	.31
Dogglass Dom.	lb.	.39	.45
Cat Bermuda	lb.	.29	.30
Echinacea	lb.	.28	.29
Elecampane	lb.	.08	.08½
Galangal	lb.	.26	.27
Geisemium	lb.	.08½	.09
Gentian	lb.	.16	.16½
Powdered	lb.	.21	.22
Geranium	lb.	.07	.09
Ginger, Jamaica, unbleached	lb.	.16	.17
Bleached	lb.	.24	.25
*Ginseng, Cultivated	lb.	—	—
Wild, Eastern	lb.	—	—
Northwestern	lb.	—	—
Southern	lb.	—	—
Golden Seal	lb.	5.20	5.25
Powdered	lb.	5.75	5.80
Hellebore, Black	lb.	1.40	1.50
White, Domestic	lb.	.21	.22
Powdered	lb.	.25	.28
*Imported	lb.	—	—
Ipecac, Cartagena	lb.	4.20	4.30
Powdered	lb.	4.30	4.40
Rio	lb.	4.20	4.25
Jalap, whole	lb.	.42	.50
Powdered	lb.	.52	.57
Kava Kava	lb.	17½	.19
Lady Slipper	lb.	.90	.95
Licorice, Russian, cut	lb.	.74	.75
Spanish natural bales	lb.	.30	.31
Selected	lb.	.31	.33
Powdered	lb.	.32	.34
*Loveage, American	lb.	.73	.75
Manaca	lb.	.28	.30
Mandrake	lb.	.11	.12
Musk, Russian	lb.	1.65	2.00
Orris, Florentine, bold	lb.	.25	.26
Verona	lb.	.23	.24
Finger	lb.	1.95	2.05
Parreira Brava	lb.	.32	.33
Pellitory	lb.	.28	.30
Pink, true	lb.	.41	.42
Pleurisy	lb.	.18	.19
Poke	lb.	.05	.06
Rhatany	lb.	.14	.15
Rhubarb Shensi	lb.	.82	.90
Chips	lb.	.62	.65
Cuts	lb.	.75	2.50
High Dried	lb.	.62	.70
Sarsaparilla, Honduras	lb.	.78	.81
American	lb.	.40	.45
Mexican	lb.	.65	.75
Seneca, Northern	lb.	1.05	1.10
Southern	lb.	100	1.05

*Nominal.

WHERE TO BUY

H. R. Lathrop & Co., Inc.
116 Beekman St.

New York

BOTANICAL DRUGS

Ibero-American Export Co.,
INCORPORATED

10 Bridge Street, New York

OFFER

Licorice Root—African Caraway Seed
Sage Leaves—Rosemary Leaves

Serpentaria	lb.	.46	.47
Skunk Cabbage	lb.	.14	.16
Snake, Black	lb.	.37	.38
Canada natural	lb.	.39	.59
Stripped	lb.	.45	.50
Spikenard	lb.	.29	.30
Squill, white	lb.	.13	.14
Stillingia	lb.	.12½	.13½
Stone	lb.	.09	.10
Turmeric, Aleppy	lb.	.0834	.08½
China	lb.	.10½	.10½
Madras	lb.	.12½	.13
Unicorn false (helonias)	lb.	.49	.54
True (Aletris)	lb.	.50	.55
Valerian, Belgian	lb.	.23	.40
*English	lb.	—	—
German	lb.	—	—
Japanese	lb.	.40	.45
Yellow Dock	lb.	.11	.14
Domestic	lb.	—	—
Yellow Parilla	lb.	.11	.12

SEEDS

*Anise, Levant	lb.	—	—
Spanish	lb.	.26	.26½
Star	lb.	.26	.26½
Canary, Spanish	lb.	15½	.16
South American	lb.	.25	.26
Caraway, African	lb.	.65	.67
*Dutch	lb.	—	—
Cardamoms, fair bleached	lb.	.75	.80
Celery	lb.	.50	.51
Colchicum	lb.	3.45	.370
Conium	lb.	.39	.33
Coriander, Bombay	lb.	.11	.11½
Morocco, Unbleached	lb.	—	—
Mogador, Unbleached	lb.	.10½	.10½
Bleached	lb.	.13	.13½
Cumin, Levant	lb.	17½	.19
*Malta	lb.	.18½	.19½
Morocco	lb.	.11½	.11½
Dill	lb.	.21	.22
Fennel, French	lb.	.17	.17½
*German, small	lb.	—	—
*Romanian, small	lb.	—	—
Flax, whole	per bbl.	18.25	—18.75
Ground	lb.	.11	.12
Foenugreek	lb.	.10½	.11
Hemp, Manchurian	lb.	.08	.08½
*Russian	lb.	.05½	.06
Job's Tears, white	lb.	.05½	.06
Larkspur	lb.	.32½	.33
Lobelia	lb.	.29	.30
Mustard, Bari, Brown	lb.	—	—
*Dutch	lb.	—	—
Bombay, Brown	lb.	.17½	.17½
California, brown	lb.	.23	.23½
Chinese	lb.	.11½	.11½
English, yellow	lb.	.28½	.29
Parsley	lb.	.23	.25
Poppy, Dutch	lb.	—	—
Russian, blue	lb.	.75	.76
Indian	lb.	.39	.40
Quince	lb.	1.14	1.24
Rape, English	lb.	—	—
Japanese small	lb.	.09½	.10
Domestic	lb.	.10	.10½
Sabadilla	lb.	.13	.14
Stramonium	lb.	.44	.49
*Strophanthus, Hispidus	lb.	1.45	.150
Kombe	lb.	.89	.99
Sunflower, domestic	lb.	.07½	.07½
South American	lb.	.07	.07½

*Nominal.

Worm, American	lb.	.08½	.09½
Levant	lb.	.89	.94

SPICES

Capsicum, African pods	lb.	.20	.21
Japan	lb.	.14½	.15
Cassia, Batavia, No. 1	lb.	.28	.29
China, Selected, mats	lb.	.24	.25
Saigon, assortment	lb.	.50	.53
Cassia Buds	lb.	.25	.26
Chilies, Japan	lb.	.154	.16
Mombasa	lb.	.23	.24
Cinnamon, Ceylon	lb.	.30	.34
Cloves, Amboynas	lb.	.59½	.60
Zanzibar	lb.	.46½	.47
Ginger, African	lb.	.12½	.13
Cochin "D"	lb.	.19	.20
Jamaica, white good	lb.	.18½	.19
Japan	lb.	.11½	.12
Mace, Banda, No. 2	lb.	.51	.52
Batavia, No. 2	lb.	.46	.47
Nutmegs, 110s	lb.	.37	.38
Pepper, black, Sing.	lb.	.25	.25½
White	lb.	.32	.32½
Pimento	lb.	.10	.10½

WAXES

Bayberry	lb.	.35	.37
Bees, Yellow, crude	lb.	.62	.64
Yellow, refined	lb.	.46	.48
White	lb.	.63	.65
Candelilla	lb.	.44	.45
Carnauba, Flor.	lb.	.93	.94
No. 1	lb.	.90	.91
No. 2	lb.	.85	.86
No. 3	lb.	.75	.76
Ceresin, Yellow	lb.	.18	.20
White	lb.	.26	.27
Montan, crude	lb.	.34	.36
Bleached	lb.	.36	.36
Ozokerite, crude, brown	lb.	.35	.36
*Green	lb.	—	—
*Refined, white	lb.	—	—
*Domestic	lb.	—	—
Refined, yellow	lb.	—	—
Paraffin, ref'd 120 deg. m.p.	lb.	12½	.13
Foreign, 130 deg. m.p.	lb.	.15	.16

Stearic Acid—

Single pressed	lb.	.23	.23½
Double pressed	lb.	.24	.24½
Triple pressed	lb.	.25½	.26

Heavy Chemicals

Acetic acid, 28 p.c.	100 lbs.	4.91	5.16
56 p.c.	100 lbs.	9.32	9.57
*70 p.c.	100 lbs.	—	—
*80 p.c.	100 lbs.	15.15	15.40
*Glacial Gov. pr.	lb.	19½	Gov. pr.
Alum, ammonia, lump	lb.	.05½	.05½
Ground	lb.	.05½	.06
Powdered	lb.	.20½	.21½
Chrome	lb.	.09½	.10½
Potash, lump	lb.	.09	.09½
Ground	lb.	.09½	.09½
Alum, Potash, Powdered	lb.	.08½	.08½
Soda, Ground	100 lbs.	.04½	.05
Aluminum chloride, liq.	lb.	.03½	.04
Sulph., high grade	lb.	.02½	.03
Low grade	lb.	.17	.17½
Aluminum hydrate, light	lb.	.11	.12½
Heavy	lb.	.09½	.10
Arsenic, white	lb.	.65	.70
Red	lb.	.38	.43
Ammonia, Anhydrous	lb.	.38	.43
Ammonia Water, 26 deg. car.	lb.	.07	.09
*20 deg. carboys	lb.	—	—
*18 deg. carboys	lb.	.06	.08
*16 deg. carboys	lb.	.05	.06
Ammonium chloride, U.S.P.	lb.	.19	.21
*Sal Ammoniac, gray	lb.	.22½	.23½
Granulated, white	lb.	.22½	.23
Lump	lb.	1.00	1.10
Sulphate, foreign	100 lbs.	8.00	8.50
Domestic	100 lbs.	—	—
Antimony Salts, 75 p.c.	lb.	—	—
65 p. c.	lb.	—	—
47 p. c.	lb.	—	—
Blanc Fixe, dry	lb.	.05	.05½
Barium, chloride	ton	80.00	90.00
Dioxide	lb.	.26	.27
Nitrate	lb.	.11½	.12½
Barytes, floated, white	ton	31.00	36.00
Off color	ton	14.00	18.00
Bleaching Powder, 35 p. c.	lb.	.05	.05½

*Nominal.

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Calcium Acetate,	100 lbs.	—	4.00
Carbide	lb.	.18	.20
Carbonate	lb.	—	—
Chloride, solid, f.o.b. N.Y. ton	24.00	26.00	
Granulated, f.o.b. N.Y. ton	30.00	34.00	
Solid, second hands	ton	30.00	34.00
Gran. second hands	ton	40.00	45.00
Sulphate, 98-99 p.c.	lb.	.09	.09
*Carbon tetrachloride	lb.	—	.65
Copper Carbonate	lb.	.31	.33
Subacetate (Verdigris)	lb.	.40	.42
Powdered	lb.	.40	.40
Sulphate, 98-99 p.c.	lb.	.0834	.09
Second hands	lb.	.0834	.09
Powdered	lb.	.10	.10 ^{1/2}
Copperas, f.o.b. works	100 lbs.	2.05	2.15
Fuel Oil, crude	gal.	2.65	2.75
Refined	gal.	3.75	4.00
Hydrofluoric Ac. 30 p.c. bbls., lb.	—	—	.05
48 p.c. in carbboys	lb.	—	.09
52 p.c. in carbboys	lb.	—	.10
Lead, Acetate, brown sugar	lb.	.1534	.16 ^{1/2}
Broken Cakes	lb.	.1634	.17
Granulated	lb.	.1734	.17 ^{1/2}
Arsenate, powdered	lb.	.31	.33
Paste	lb.	.15	.17
*Nitrate	lb.	—	Nominal
Oxide, Litharge, Amer. pd. lb.	lb.	.0934	.09 ^{1/2}
Foreign	lb.	—	—
Red, American	lb.	—	.10 ^{1/2}
Sulphate, basic	lb.	—	.0834
White, Basic Carb., Amer. dry	lb.	—	.09 ^{1/2}
in Oil, 100 lbs. or over	lb.	—	.10 ^{1/2}
English	lb.	—	—
Lime, hydrate	lb.	Nominal	
Sulphite solution	gal.	.15	.19 ^{1/2}
Magnesite, f.o.b. Cal.	lb.	42.00	44.00
f. o. b. N. Y.	lb.	65.00	70.00
Muriatic acid,	—	—	—
*18 deg. carbboys	lb.	.0214	.0224
20 deg. carbboys	lb.	.0234	.0244
22 deg. carbboys	lb.	.0234	.0334
Nickel oxide	lb.	.60	.70
Salts, single	lb.	.16	.17
double	lb.	.14	.15
Nitric acid, 36 deg. carbboys . . .	lb.	.0634	.0654
*38 deg. carbboys	lb.	.0714	.08
40 deg. carbboys	lb.	.0714	.08
42 deg. carbboys	lb.	.0834	Gov. pr.
Aqua Fortis, 36 deg. carb. lb.	lb.	—	—
38 deg. carbboys	lb.	—	.05 ^{1/2}
40 deg. carbboys	lb.	—	.06
42 deg. carbboys	lb.	—	.06
Phosphorus, red	lb.	—	—
Yellow	lb.	1.15	1.20
Plaster of Paris	bbl.	1.05	1.20
True Dental	bbl.	1.50	1.76
Potash Caustic, 88-92	lb.	1.75	2.00
Potassium Bichromate	lb.	.73	.75
Carbonate, calc.	lb.	.44	.45
Chlorate, cryst	lb.	.35	.35
Powdered	lb.	.40	.41 ^{1/2}
Muriate, basis 80 p.c. per ton	350.00	370.00	
Prussiate, red	lb.	2.60	2.75
Yellow	lb.	1.00	1.15
Saltpetre, Granulated	lb.	.2714	.27 ^{1/2}
Refined	lb.	.3134	.31 ^{1/2}
Soda Ash, 58 p.c. in bags 100 lbs.	—	2.60	3.00
In bbls.	100 lbs.	3.15	3.30
Caustic, 76 p.c. Solid 100 lbs.	—	4.35	4.60
Powd. or gran., 76 p.c.	100 lbs.	5.25	5.50
Sodium Bichromate	lb.	.2444	.25
Bisulphate	lb.	—	—
Carbonate, Sal. Soda, Am. 100 lbs.	—	1.30	1.40
Chlorate	lb.	.24	.25
Cyanide	lb.	.32	.35
Hyposulphite, bbls.	100 lbs.	2.75	3.00
Kegs	lb.	2.40	2.60
*Nitrate, tech	100 lbs.	.0634	.07
Nitrite	lb.	.26	.27
Prussiate, Yellow	lb.	.41	.45
Silicate, 60 p.c.	100 lbs.	6.00	6.30
40 p.c.	100 lbs.	2.60	2.80
Sod. Sulph., Glb. salt 100 lbs.	—	2.25	3.00
Sulphide 60-62 p.c. cryst. . . .	lb.	.0934	.09 ^{1/2}
30-32 p.c.	lb.	.0734	.07 ^{1/2}
*Sulphur (crude) f.o.b. N.Y. ton	—	—	—
f. o. b. Baltimore	ton	—	—
Sulphuric Acid	—	—	—
60 deg. f.o.b. wks.	ton	18.00	Gov. pr.
66 deg. f.o.b. wks.	ton	28.00	Gov. pr.
Oleum, f.o.b. wks.	ton	32.00	Gov. pr.
Battery Acid car's per 100 lbs.	—	Nominal	
Tin, bichloride	lb.	—	Nominal
Zinc, carbonate	lb.	.22	.24
Chloride	lb.	.1534	.15 ^{1/2}
Sulphate	lb.	.1334	.13 ^{1/2}
*Nominal.	—	.05	.05 ^{1/2}

WHERE TO BUY

For Prompt Delivery:

Prussiate of Potash!

A. KLIPSTEIN & COMPANY

**644-652 Greenwich Street
New York City**

Also:
**Dyestuffs, Gums, Oils, Tanning Materials
and Other Chemicals**

ZINC OXIDE

Lead Free

Dyestuffs, Tanning Materials and Accessories

COAL-TAR CRUDES

Benzol, C. P.	gal.	.25	.28%
(90 p.c.)	gal.	.26%	.27%
Cresylic acid, crude, 95-97 p.c.	gal.	1.15	1.20
50 p.c.	lb.	.75	.85
25 p.c.	lb.	.40	.45
Cresol, U.S.P.	lb.	.21	.22
Cresotone oil, 25 p.c.	gal.	.38	.45
Dip. oil, 20 p.c.	gal.	.40	.50
Naphthalene, balls	lb.	.10%	.10%
Flake	lb.	.08%	.083%
Phenol	lb.	.41	.42
Pitch, various grades	ton	10.00	20.00
Solvent naphtha, waterwhitegal.	ton	.20	.24
Crude heavy	gal.	.14	.17%
*Toluol, pure	gal.	1.50	1.55
*Commercial, 90 p.c.	gal.	1.50	1.55
XyloL pure water white	gal.	.45	.55

INTERMEDIATES

Acid Benoic	.lb.	2.80	— 2.90
“Acid Benzoic Crude	.lb.	Nominal	
Acid H	.lb.	3.25	— 3.50
Acid Metanilic	.lb.	—	
Acid Naphthionic, Crude	.lb.	1.00	— 1.10
Refined	.lb.	1.20	— 1.30
Acid Sulphanilic, crude	.lb.	.31	— .33
Refined	.lb.	.42	— .44
p-Aminophenol Base	.lb.	4.25	— 4.50
p-Aminophenol Hydrochloride	.lb.	4.25	— 4.50
Aminoanisobenzene	.lb.		
Aniline Oil, drums extra	.lb.	.28	— .30
Aniline Salts	.lb.	.43	— .45
Aniline for red	.lb.	1.15	— 1.22
<i>Anthracene (80 p.c.)</i>	.lb.	.85	— .90
Anthraquinone	.lb.	6.00	— 6.50
Benzaldehyde	.lb.	3.50	— 4.00
Benzidine Base	.lb.	1.65	— 1.75
Benzidine Sulphate	.lb.	1.40	— 1.45
Benzotea of Soda	.lb.	2.80	— 2.90
Benzylchloride	.lb.	2.60	— 2.70
Diamidophenol	.lb.	6.50	— 7.00
o-Dianisidine	.lb.		
Dinitrophenol	.lb.	.50	— .60
p-Dichlorbenzol	.lb.	.15	— .16
p-Dichlorbenzol	.lb.	.15	— .18
Diethylaniline	.lb.	4.00	— 4.50
Dimethylaniline	.lb.	.76	— .78
Dimotbenzo	.lb.	.35	— .37
m-Dinitrobenzene	.lb.	.45	— .50
Dinitrochlorbenzene	.lb.	.50	— .56
Dinitrochlorbenzol	.lb.	40%	— 40%
Dinitronaphthalene	.lb.	.55	— .65
Dinitrophenol	.lb.	.59	— .60
Dinitrotoluol	.lb.	.60	— .62
Diphenylamine	.lb.	1.05	— 1.15
Dioxynaphthalene	.lb.	—	
“G” Salt	.lb.	.85	— .95
Nominal			

Hydrazobenzene	.lb.	1.50	—	2.00
Induline	.lb.	2.00	—	2.75
Methylanthraquinone	.lb.	—	—	—
Monodinitrochlorbenzol	.lb.	4.48	—	5.2
Monooxytianiline	.lb.	1.00	—	1.25
Naphthalenediamine	.lb.	—	—	—
a-Naphthol	.lb.	1.50	—	1.60
b-Naphthol, Technical	.lb.	.65	—	.70
Sublimed	.lb.	.85	—	.90
a-Naphthylamine	.lb.	.61	—	.63
b-Naphthylamine	.lb.	1.65	—	1.75
p-Nitranilin	.lb.	1.85	—	1.95
Nitrobenzene	.lb.	20	—	22
o-Nitrochlorbenzol	.lb.	.50	—	.56
Nitronaphthalene	.lb.	.44	—	.45
p-Nitrophenol	.lb.	1.60	—	1.70
p-Nitrotoluol	.lb.	1.55	—	1.65
Nitrotoluol	.lb.	.55	—	.65
o-Nitrotoluol	.lb.	.75	—	.80
m-Phenylenediamine	.lb.	3.00	—	3.40
p-Phenylenediamine	.lb.	4.00	—	4.15
Phthalic Anhydride	.lb.	4.25	—	4.75
Pseudo-Cumol	.lb.	—	—	—
Resorcin, crystals, U. S. P.	.lb.	8.00	—	8.50
Resorcin, Technical	.lb.	4.50	—	6.00
Tetranitromethylaniline	.lb.	—	—	2.90
Tolidin	.lb.	2.55	—	3.00
o-Toluidine	.lb.	1.00	—	1.10
p-Toluidine	.lb.	2.05	—	2.25
m-Toluidinediamine	.lb.	2.50	—	2.75
Xylene, pure	.gal.	1.00	—	1.00
Xylene, Com.	.gal.	.40	—	.45
COAL-TAR COLORS				
Acid Black	.lb.	1.50	—	2.00
Acid Blue	.lb.	3.50	—	5.50
Acid Brown	.lb.	1.50	—	2.50
Acid Fuchsin	.lb.	6.25	—	7.50
Acid Orange	.lb.	.40	—	.60
Acid Orange II	.lb.	.60	—	.80
Acid Orange III	.lb.	1.00	—	1.25
Acid Red	.lb.	1.50	—	1.80
Acid Scarlet	.lb.	.95	—	1.25
Acid Violet 10 B.	.lb.	8.00	—	10.00
Alpine Yellow	.lb.	4.25	—	4.75
Alizarin Blue, bright	.lb.	7.75	—	9.25
Alizarin Blue, medium	.lb.	6.25	—	7.50
Alizarin Brown, conc.	.lb.	7.50	—	8.50
Alizarin Orange	.lb.	6.30	—	8.00
Alizarin Red, W. S. Paste	.lb.	10.00	—	11.50
Alkali Blue, Domestic	.lb.	9.00	—	12.00
Alkali Blue, Imported	.lb.	14.00	—	15.00
Alpine Red	.lb.	6.00	—	7.00
Azo Carmine	.lb.	5.50	—	6.50
Azo Yellow	.lb.	3.00	—	3.50
Azo Yellow, green shade	.lb.	3.50	—	4.50
Auramine, Single O, Dom.	.lb.	4.75	—	5.25
Auramine, Double O, Imp.	.lb.	—	—	—
Benz Purpérine 10 B	.lb.	6.50	—	6.75
Benz Purpérine 4 B	.lb.	3.50	—	5.50
Bismarck Brown Y	.lb.	.85	—	1.15
Bismarck Brown R	.lb.	1.10	—	1.25
Chrome Black, Dom.	.lb.	1.65	—	2.00
Chrome Black, Imp.	.lb.	3.30	—	4.00
Chrome Blue	.lb.	2.50	—	3.75
Chrome Green, Dom.	.lb.	2.50	—	2.75
Chrome Red	.lb.	2.25	—	2.75
Chrysoidine F	.lb.	1.30	—	1.50
Chrysoidine Y	.lb.	1.15	—	1.25
Chrysophine, Domestic	.lb.	6.75	—	8.00
Chrysophine, Imported	.lb.	11.00	—	12.50
Congo Red 4B Type	.lb.	1.60	—	2.25
Crystal Violet	.lb.	6.50	—	7.50
Diamine Sky Blue F. F.	.lb.	9.25	—	13.00
Direct Black	.lb.	1.10	—	1.40
Direct Blue	.lb.	2.00	—	3.50
Direct Sky Blue	.lb.	2.50	—	6.00
Direct Brown	.lb.	2.50	—	3.00
Direct Bordeaux	.lb.	2.85	—	3.40
Direct Fast Red	.lb.	5.00	—	6.00
Direct Yellow	.lb.	2.50	—	2.75
Direct Fast Yellow	.lb.	2.90	—	3.80
Direct Violet	.lb.	2.60	—	3.50
Emerald Green Crystals	.lb.	18.50	—	20.00
Erythrosine	.lb.	11.50	—	14.00
Fast Light Yellow, 2-G.	.lb.	3.25	—	4.00
Fast Red, 6B extra, can't	.lb.	4.60	—	5.00
Fur Black, extra	.lb.	2.40	—	3.10
Fur Brown B	.lb.	2.00	—	3.10
Fuchsin Crystals, Dom.	.lb.	7.75	—	9.00
Fuchsin Crystals, Imp.	.lb.	12.00	—	12.50
Gernasine	.lb.	8.75	—	9.25
Green Crystals, Brilliant	.lb.	12.00	—	13.00
Indigo 20 p.c. paste	.lb.	1.75	—	2.00
Indigotine, conc.	.lb.	4.25	—	5.00
Indigotine, paste	.lb.	1.50	—	2.50
Induline Base	.lb.	1.75	—	2.50
Magenta Acid, Domestic	.lb.	4.25	—	5.00
Magenta Crystals, Imported	.lb.	11.00	—	12.00
Malachite Green, Crystals	.lb.	7.75	—	9.00
Malachite Green, Powdered	.lb.	5.10	—	6.50
Metanil Yellow	.lb.	2.35	—	2.75

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Medium Green	lb. 5.00	— 6.00
Methylene Blue, tech.	lb. 3.50	— 3.75
Methyl Violet	lb. 3.30	— 3.50
Naphthol Green	lb. 2.50	— 2.75
Nigrosine, Oil Sol.	lb. .85	— 1.00
Nigrosine, spts. sol.	lb. .75	— 1.25
Nigrosine water sol., blue	lb. .75	— 1.05
Jet	lb. .80	— 1.00
Naphthylamine Red	lb. 6.75	— 7.50
Oil Black	lb. .85	— 1.20
Oil Orange	lb. 2.00	— 2.50
Oil Scarlet	lb. 2.00	— 2.50
Oil Yellow	lb. 1.88	— 2.50
Orange, R. G., contract	lb. 2.00	— 2.25
Orange Y, conc.	lb. 1.00	— 1.25
Oxamine Violet	lb. 6.50	— 7.00
Patent Blue, Swiss Type	lb. 20.00	— 23.00
Phosphine G. Domestic	lb. 3.50	— 4.00
Ponceau	lb. 1.80	— 2.50
Prunilaine, Dom.	lb. 5.00	— 6.00
Rhodamine B, ex. cont.	lb. 80.00	— 85.00
Scarlet 2R	lb. 3.25	— 4.50
Sulphur Blue, Dom.	lb. 2.25	— 2.75
Soluble Blue, Imp.	lb. 12.00	— 13.00
Sulphur Black	lb. .40	— .65
Sulphur Black E.S. standard	lb. .90	— 1.00
Sulphur Black 100 p.c.	lb. 1.10	— 1.75
Sulphur Black, 150 p.c.	lb. 1.50	— 2.15
Sulphur Blue-Black	lb. 3.10	— 3.65
Sulphur Brown	lb. .12	— .50
Sulphur Green	lb. 1.75	— 2.50
Sulphur, Navy Blue	lb. 1.40	— 1.75
Sulphur Yellow	lb. 1.10	— 1.55
Tartrazine, Domestic	lb. 1.70	— 1.80
Tartrazine, Imported	lb. 1.25	— 1.40
Uranine, Domestic	lb. 10.00	— 11.00
Wool Green S. Swiss	lb. 8.00	— 8.50
Valonia, solid, 65 p.c. tan	lb. 5.00	— 6.00
Victoria Blue, base, Dom.	lb. 9.50	— 11.00
Victoria Green	lb. 5.00	— 8.00
Victoria Red	lb. 8.25	— 9.00
Victoria Yellow	lb. 6.50	— 8.00
Yellow for wool	lb. 1.50	— 2.25

NATURAL DYESTUFFS

Anatto, fine	lb. .33	— .34
Seed	lb. .12	— 124%
Carmine No. 40	lb. 4.25	— 4.75
Cochineal	lb. .80	— 1.00
Gambier, see tanning.		
Indigo, Bengal	lb. 3.00	— 3.50
Oudes	lb. 2.25	— 2.75
Guatemala	lb. 2.25	— 2.75
Kurpahs	lb. 2.25	— 2.75
Madras	lb. .90	— 1.00
Madder, Dutch	lb. 26.25	— 29%
Nutgalls, blue Aleppo	lb. —	
Chinese	lb. 33.25	— 34%
Persian, Berlin	lb. —	
Quercitron Bark, see tanning.		
Sumac, see tanning.		
China	lb. .09	— .10%
Turmeric, Madras	lb. .12	— .12%
*Aleppo	lb. —	
Pubna	lb. 10.25	— .11%

DYEWOODS

Barwood	lb. —	—
Camwood, chips	lb. .17	— .20
Fustic, sticks	ton 55.00	— 60.00
Chips	lb. .0334	— .05%
Hypernic, chips	lb. .09	— .10
Logwood, Sticks	ton 50.00	— 55.00
Chips	lb. .0334	— .05%
Quercitron, see tanning.		
Red Saunders, chips	lb. .15	— .17

EXTRACTS

Achil, Double	lb. .15%	— .17%
Triple	lb. .18	— .20
Concentrated	lb. .22	— .29
Cutch, Mangrove, see tanning.		
Rangoon, boxes	lb. .23%	— .25%
Liquid	lb. .12	— .134%
Tablet	lb. 13.25	— .14
Cudbear, French	lb. —	
*English	lb. —	
*Concentrated	lb. —	
Flavine	lb. 1.00	— 1.50
Fustic, Solid	lb. .27	— .28
Liquid, 51 deg.	lb. 13.25	— .15
Gall	lb. .29	— .30
Hematinic Extract	lb. .13	— .14
Crystals	lb. .21	— .23
Hypernic, liquid	lb. .30	— .32
Indigo, natural for cotton	lb. .50	— .54
For wool	lb. .30	— .32
Indigotine, 100 p.c. pure	lb. —	— 5.50
Logwood, solid	lb. .21	— .22
Crystals	lb. .21	— .26
51 deg., Twaddle	lb. 12.25	— .134%
Contract	lb. 10.25	— .10%
*Nominal		

WHERE TO BUY

E. F. DREW & CO., Inc.
50 BROAD ST. NEW YORKAniline Dyestuffs
Dyewood Extracts
Industrial Oils
Chemicals

Osage Orange—	
Powdered	lb. — — .25
Paste	lb. .06 — .12
Persian Berries	lb. —
Quebracho, see tanning.	
Quercitron, 51 deg. lia.	lb. .07 — .0734
Sumac, see tanning.	

MISCELLANEOUS DYESTUFFS

Albumen, Egg	lb. 1.25	— 1.35
Blood, imported	lb. .90	— .95
Domestic	lb. .65	— .70
Prussian Blue	lb. .80	— .90
Soluble	lb. .95	— 1.00
Turkey Red Oil	lb. .13	— .18
Zinc Dust, prime heavy	lb. .134	— .144

RAW TANNING MATERIALS

Algarobilla	ton 40.00	— 150.00
Divi Divi	ton 84.00	— 86.00
Hemlock Bark	ton 15.00	— 16.00
Mangrove, African, 38 p.c.	ton 60.00	— 62.00
Bark, S. A.	ton 45.00	— 50.00
*Myrobalans	ton 63.50	— 65.00
Oak Bark	ton 15.00	— 16.00
Ground	ton —	— 17.50
Quercitron Bark rough	ton 13.00	— 15.00
Ground	ton 27.00	— 29.00
Sumac, Sicily, 27 p.c. tan	ton 97.00	— 100.00
Virginia, 25 p.c. tan	ton 63.00	— 73.00

TANNING EXTRACTS

Chestnut, ordinary, 25 p.c. tan, bbls.	lb. .024	— .03
Clarified, 25 p.c. tan, bbls.	lb. .03	— .034
Crystals, ordinary	lb. —	
Clarified	lb. —	
Gambier, 25 p. c. tan.	lb. .16	— .17
Common	lb. .24	— .25
Cubes, Singapore	lb. .28	— .30
Cubes, Java	lb. .19	— .19
*Temblock, 25 p.c. tan	lb. .03	— .034
Larch, 25 p.c. tan	lb. .03	— .034
Crystals, 50 p.c. tan	lb. .06	— .07
Mangrove, 35 p.c. tan	lb. .08	— .12
Liquid, 25 p.c. tan	lb. .06	— .08
Muskegon, 23-30 p.c. tan, 50 p.c. total solids	lb. .014	— .024
Myrobalans, liq. 23-25 p.c. tan	lb. Nominal	
Solid, 50 p.c. tan	lb. .11	— .12
Oak Bark, liquid, 23-25 p.c. tan	lb. .034	— .044
Quebracho, liquid, 35 p.c. tan	lb. .064	— .07
35 p.c. tan, untreated	lb. —	
35 p.c. tan, bleaching	lb. .07	— .0734
Solid, 65 p.c. tan, ordinary	lb. .134	— .16
Clarified	lb. .10	— .12
Spruce, liquid, 20 p.c. tan	lb. .01	— .014
Sumac, liquid, 25 p.c. tan	lb. .07	— .10
Valonia, solid, 65 p.c. tan	lb. Nominal	

Oils

COD, Newfoundland	gal. 1.39	— 1.40
Domestic, prime	gal. 1.27	— 1.28
Liver, Newfoundland	bbi. 89.00	— 90.00
Norwegian	bbi. 135.00	— 150.00
Degras, American	lb. .23	— .24
*English	lb. —	
German	lb. —	
Neutral	lb. .25	— .27
Horse	lb. .16	— .17
No. 2	gal. 1.38	— 1.47
Lard, prime winter	gal. 2.24	— 2.25
Off prime	gal. 1.71	— 1.73
Extra No. 1	gal. 1.64	— 1.66
No. 1	gal. 1.49	— 1.51
No. 2	gal. 1.44	— 1.46
Menhaden, Light strained	gal. 1.39	— 1.41
Yellow, bleached	gal. 1.42	— 1.43
White, bleached, winter	gal. 1.44	— 1.45
Northern, crude	gal. 1.23	— 1.24
*Southern, crude, f.o.b. plant	gal. 1.23	— 1.24
*Nominal		

Neatsfoot, 20 deg.	gal. 3.44	— 3.46
30 deg., cold test	gal. 2.99	— 3.02
40 deg., cold test	gal. 2.94	— 2.96
Dark	gal. 1.49	— 1.51
Prime	gal. 1.94	— 1.96
Oleo Oil	lb. .23	— .24
*Porpoise, body	gal. —	—
Jaw	gal. 20.00	— 22.00
Red (Crude Oleic Acid)	lb. .16	— .17
Saponified	lb. .17	— .17
*Sod Oil	lb. —	—
*Sperm, bleached, winter	38 deg., cold test	gal. 2.22
45 deg., cold test	gal. 2.17	— 2.18
Natural, winter, 38 deg., cold test	gal. 2.19	— 2.20
Stearic, single pressed	lb. .22	— .23
Double pressed	lb. .23	— .24
*Triple pressed	lb. .24	— .25
Tallow, acidified	gal. 1.57	— 1.59
*Prime	gal. 1.52	— 1.53
Whale, natural winter	gal. 1.49	— 1.50
Bleached, winter	gal. 1.52	— 1.53

VEGETABLE OILS

Castor, No. 1 bbls.	lb. .30	— .31
Cases	lb. .31	— .32
No. 3	lb. .29	— .30
Cocoanut, Ceylon, bbl.	lb. .16	— .16
*Ceylon, tanks	lb. .154	— .154
Cochin, bbls.	lb. .17	— .17
Tanks	lb. .17	— .17
Corn, refined, bbls.	lb. 21.47	— 21.67
*Crude, bbls.	lb. .18	— .18
Cottonseed, Crude, f. o. b. mills, in tanks	lb. —	— .17
*Summer, yellow, prime	lb. .21	— .21
*White	lb. —	
*Winter yellow	lb. —	
Linseed, raw cast lots	gal. 1	— 1.88
5 barrel lots	gal. —	— 1.90
Boiled, 5-bbl. lots	gal. —	— 1.92
Double Boiled, 5-bbl. lots	gal. —	— 1.94
Olive, denatured	gal. 4.25	— 4.50
*Foots	lb. .42	— .43
Palm, Lagos casks	lb. —	
Benin	lb. —	
Niger	lb. —	.37
*Palm Kernel, domestic	lb. .18	— .18
*Imported	lb. —	
Peach Kernel	lb. .40	— .42
Peanut Oil, edible	lb. .20	— .21
*Crude f.o.b. mills	gal. —	.137
Pine Oil, white steam	gal. .57	— .58
Yellow, steam	gal. .56	— .57
*Poppy Seed	gal. —	
Rapeseed, refined	gal. —	
Blown	gal. —	
*Rosin oil, first rect.	gal. —	
Second	gal. —	
*Sesame, domestic	gal. —	
*Imported	gal. —	
Soya Bean, Manchurian	lb. .18	— .18
*Tar Oil, gen. dist.	lb. .35	— .35
Commercial	lb. —	— .34

MINERAL

Black, reduced, 29 gravity	gal. .24	— .25
29 gravity, 15 cold test	gal. .24	— .25
Summer	gal. .24	— .25
Cylinder, light, filtered	gal. .45	— .50
Dark, filtered	gal. .39	— .43
Extra cold test	gal. .65	— .75
Dark steam, refined	gal. .28	— .32
Neutral, filtered, lemon, 33@34 gravity	gal. —	.31
White 30@31 gravity	gal. .50	— .55
Paraffin, high viscosity	gal. .40	— .41
903 sp. gr.	gal. .34	— .36
Red Paraffin	gal. .30	— .38
Spindle, filtered	gal. —	
No. 200	gal. .38	— .40
No. 100	gal. .36	— .38
No. 110	gal. .32	— .33

NAVAL STORES

(Carloads ex-dock)	
*Spirits Turpentine in bbls.	gal. .64
Wood Turpentine, steam distilled, bbls.	gal. .59
*Turpentine, Destructive distilled, bbls.	gal. .44
*Pitch, prime	200-lb. bbl. 7.25
Rosin, com., to g.d.	80 bbl. 14.25
*Tar, kiln-burnt, pure 50-gal.	bbls. 12.50
*Nominal	

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

SHELLAC

D. C.	lb. .86	.87
*Diamond "I"	lb. .86	.87
V. S. O.	lb. .86	.87
Fine Orange	lb. .75	.80
Second Orange	lb. .72	.73
T. N.	lb. .68	.69
*A. C. Garnet	lb. .68	.79
Button	lb. .80	.81
Regular, bleached	lb. .69	.70
Bone, dry	lb. .79	.80

OIL CAKE AND MEAL

Cottonseed Cake, f.o.b. Texas..	—	53.50
f. o. b. New Orleans	—	47.50
Cottonseed, Meal, f.o.b. Atlanta	—	48.50
Columbia	—	53.00
New Orleans	ton	
Corn Cake	short ton	55.50
Meal	short ton	59.00
Linseed cake, dom.	short ton	51.00
Linseed Meal	short ton	52.00

COCOA

Bahia	lb. .12	.12%
Caracas	lb. .12	.13
Hayti	lb. .10%	.10%
Maracaibo	lb. .22	.23
Trinidad	lb. .12	.12%

DEXTRINES AND STARCHES

*British Gum, Globe, per 100 lbs.	—	—
Dextrine, Corn, white or yellow	lb. .08	.08%
Potato, white or canary	lb. .19%	.20%
Starch Corn, bags & bbls....	4.25	4.60
*Pearl, Globe, bags & bbls....	4.07	4.40
Potato, Domestic	lb. .12	.12%
*Imported, duty paid....	lb. .12	.12%

REFINED SUGAR

(Prices in Barrels)

Ar. Fed. War Amer. Nat. bu'l' eral no.	—	—
Powdered	9.15 9.15 9.15 9.15 9.15	
XXX	9.20 9.20 9.20 9.20 9.20	
Confectioners A	8.90 8.90 8.90	8.90
Standard Gran.	9.05 9.05 9.05 9.05 9.05	
*Nominal. ^{Prices fixed by Government.}	—	—

WHERE TO BUY

Chas. Morningstar & Co., Inc.

WOOLWORTH BLDG. - BARCLAY-6005-6

STARCHES

DEXTRINES

ALBUMEN

GLUCOSE

Soap Makers' Materials

ANIMAL AND FISH OILS

(Carlots)

Menhaden, crude, f.o.b. mills, ga.	1.23	1.24
Light, strained	gal. 1.39	1.41
Yellow, bleached	gal. 1.42	1.43
White, bleached, winter, gal.	1.44	1.45
Neatsfoot, 20 deg.	gal. 3.44	3.46
30 deg., cold test	gal. 2.99	3.02
40 deg., cold test	gal. 2.94	2.96
Dark	gal. 1.49	1.51
Prime	gal. 1.94	1.96
Red, (Crude oleic acid)	lb. 16 1/2	.17
Saponified	lb. 17	.17 1/2
Stearic, single pressed	lb. .21	.22
Double pressed	lb. .23	.24

VEGETABLE OILS

Castor, No. 1, bbls.....	lb. .30	.31
No. 3	lb. .29 1/2	.30
Cocconut, Ceylon, bbls.....	lb. 16 1/2	.16 1/2
*Ceylon, Tanks	lb. 15 1/4	.15 1/4
Cochin, bbls	lb. .17	.17 1/2
Tanks	lb. .17	.17 1/2
Corn, crude, bbls.....	lb. .18	.18 1/2
Refined, barrels	21.47	21.67

*Nominal.

*Cottonseed, crude, f.o.b. mills

in tanks

"Summer, yellow, prime

"White

"Winter, Yellow

Linseed, raw car lots

5-bbl. lots

Olive, denatured

Foots

Palm, Lagos, casks

Niger

Palm Kernel, domestic

Peanut, edible

"Crude, f.o.b. mills

Pine, white steam

"Sesame, domestic

"Soya Bean, Manchurian

.18 1/2 — 18 1/2

GREASES, LARDS, TALLOWES

(New York Markets)

Grease, white	lb. .19	.20
Yellow	lb. .17	.17 1/2
House	lb. .16 1/2	.16 1/2
Brown	lb. .16	.16 1/2
Lard, City	lb. .27	.27 1/2
Compound	lb. 22 1/2	.23 1/2
Stearine, lard	lb. .29	.29 1/2
Oleo	lb. .21 1/2	.21 1/2
Tallow, edible	lb. .20	.20 1/2
City, prime	lb. .18	.18 1/2
Choice Country	lb. 18 1/2	.18 1/2

(Western Markets)

Tallow, edible	lb. .20	.20 1/2
City Fancy	lb. .19 1/2	.20
Prime Packers	lb. .19 1/2	.19 1/2
Grease, Choice White	lb. .20	.20 1/2
"A" White	lb. .19 1/2	.19 1/2
"B" White	lb. .17 1/2	.17 1/2
Yellow	lb. .16	.16 1/2
Brown	lb. .14	.15
Bone	lb. .11 1/2	.12
House	lb. .17 1/2	.17 1/2
Stearine, prime oleo	lb. .26	.26 1/2
Lard, city steam	lb. .26	.26 1/2

*Buyers' Tanks.

MERCK & CO.

Chemicals

St. Louis

NEW YORK

Works at Rahway, N. J.

Montreal

NAPHTHALENE

Balls and Crystals

U. S. P. PHENOL.

The Chatfield Mfg. Co., Cincinnati, O., U. S. A.

Want Ads

RATE—Our charge for these *WANT ADS* in this publication, *all classifications*, is \$1.00 an issue for 20 words or less; additional words, 5c each.

PAYMENT in all cases should accompany the order; add 10c if answers are to be forwarded.

Address, DRUG AND CHEMICAL MARKETS

No. 3 Park Place

New York

EMPLOYEES FURNISHED. Stores sold—also furnished; All State. Positions. Doctors, Dentists, Veterinarians furnished.

F. V. KNIEST. Omaha, Neb., Estab. 1904.

The Var Oil & Paint Company, Schofield Building, Cleveland, Ohio, has had plans prepared for the erection of a new one-story plant, about 45x100 feet, to cost \$25,000.

The Mallinckrodt Chemical Works, Westside Ave., Jersey City, N. J., will build a new boiler plant extension to cost about \$5,000. Plans for the structure have been prepared.

Charles Eneu Johnson & Company, 509 South Tenth Street, Philadelphia, Pa., manufacturers of printing inks, etc., have filed plans for the erection of a new one-story, brick and concrete addition, about 60x120 feet, to cost \$25,000.

In connection with the new plant to be established by the War Department at Saltville, Va., for the manufacture of gas bombs, at an initial cost of about \$250,000, arrangements are being perfected to secure the necessary supplies of soda ash and other alkali products from the Mathison Alkali Works, operating in this section. It is understood that the Mathison plant will increase its present output to furnish the demand for the new works.

The Southern Pine Tar & Oil Company, Savannah, Ga., recently incorporated with a capital of \$200,000, is planning for the operation of a plant for the manufacture of oils, tar, chemicals and other specialties. Henry Henken and W. W. Wilder head the company.

Ethyl Propionate Ethyl Butyrate

Spot Delivery from Either Coast

Two new solvents for soluble cotton (or pyroxylin).

These solvents can be advantageously used as substitutes for amyl acetate.

Ethyl Propionate has a specific gravity of .8963 and ranges in boiling points from approximately 75.0° C. to 110° C.

Ethyl Butyrate has a specific gravity of .8875 and ranges in boiling points from approximately 100° C. to 130° C.

Both solvents are particularly dry, comparing very favorably with amyl acetate in this respect.

PRICES

in 50-gal. or 100-gal. drums:

Ethyl Propionate, \$2.75 per gallon
Drums extra and returnable

Ethyl Butyrate, \$3.75 per gallon
Drums extra and returnable

*See these and other Chemicals
from Kelp at Chemical
Exposition*

Chemical Sales Dept.

Hercules Powder Company

Wilmington, Del.

“NATIONAL” Drugs-Gums-Chemicals- Essential Oils

We manufacture and distribute Aniline Colors, Chemicals, Drugs, Essential Oils and Gums.

Barium Peroxide, 90%.

Calomel, Howard's.

Chalk Precipitated, Sturge's Eng.

Cod Liver Oil, Newfoundland.

Menthol.

Spermaceti.

Gums, Tragacanth and Arabic.

National Aniline & Chemical Company

Incorporated

21 Burling Slip, New York



“Hauling The Bark”

From the tree to your plant—a direct path paved with excellent service and skilled labor. The result—a superior cork which will warrant your investigation.

CHICAGO CORK WORKS CO.

**MANUFACTURERS
AND IMPORTERS**

624-630 So. Wabash Ave. Chicago, Ill.

THE BAYER COMPANY, Inc.

Completely Under American Control

In view of the publicity recently given The Bayer Company, Inc., the following statement is made:

The Company is controlled by the Alien Property Custodian and the manufacture and sale of its products are entirely under the supervision of the following officers and directors appointed by him, *all of whom are Americans*:

F. B. LYNCH, *President* G. H. CARNAHAN, *Vice-President*
E. I. McCLINTOCK, *Secretary and Treasurer*

Board of Directors:

N. F. BRADY G. H. CARNAHAN MARTIN H. GLYNN GEORGE C. HAIGH
F. B. LYNCH E. J. LYNETT C. B. MACDONALD J. R. SPEER

As soon as its books have been audited and the property appraised, the capital stock of the Company will be sold by the Alien Property Custodian to *American Citizens*.

The proceeds of the sale of the property of the Company will be held by the Alien Property Custodian until the end of the war, when Congress will decide as to the disposition of the money.

All profits as well as all the money realized from the sale of the Company will be used for the purchase of Liberty Bonds to help in the prosecution of the War until the *complete defeat of Germany*.

Therefore, genuine Bayer-Tablets and Capsules of Aspirin as well as other Bayer Products may be purchased with full confidence.

THE BAYER COMPANY, Inc.

Manufacturers of

**BAYER-TABLETS
AND CAPSULES
OF ASPIRIN**

*A Contract is a Contract***BUSH, BEACH & GENT**
INCORPORATED80 MAIDEN LANE
New YorkHOLBROOK BUILDING
San Francisco**BICHROMATE OF SODA**

STOCKS NEARBY FUTURES

Special Terms to initiate business

Selling Agents for Sawyer Tanning Co., Napa, California

Telephone, Barclay 5214-5215

**YELLOW PHOSPHORUS
IODINE PREPARATIONS
MURIATE OF POTASH—SPOT**

Inquiries are solicited

S. SUZUKI & CO., Ltd.
15-21 Park Row, New York**Marden, Orth & Hastings Corp.**

Established 1837

**HEAVY CHEMICALS
INTERMEDIATES
ANILINE DYES
OILS, GREASES**

61 Broadway, New York Phone: Bowling Green 9860

Boston Chicago Cleveland Seattle San Francisco

**EXTRACTUM FELICIS MARIS
24/25%**We manufacture and have a continuous
output of a high grade quality and can supply
quantities for immediate or future delivery.**CHEMICAL WORKS MADOERY, Ltd.**
ESTABLISHED 1902

BASEL, SWITZERLAND.

NEW YORK OFFICE 165 BROADWAY

R. W. GREEFF & CO., Inc.
80 MAIDEN LANE**MANUFACTURERS AGENTS
EXPORTERS & IMPORTERS**
Technical & Pharmaceutical Chemicals
Aniline Dyes & IntermediatesAgents for R. W. GREEFF & CO.
LONDON & MANCHESTER :: ENGLAND**ANTHRAQUINONE****FLANDREAU & CO., Inc.**115 BROADWAY
NEW YORK

Rector 2133-2134-2135

ALPHA NAPHTHYLAMIN

(99%)

ORTHO NITRO TOLUOL
(98%)**ORTHO TOLUIDINE**
(98%)**LIQUID GUAIACOL**
(U. S. P.)**NEWPORT CHEMICAL WORKS, Inc.**

120 BROADWAY

NEW YORK CITY

PRAT-DUMAS
FRENCH
FILTERING PAPER

Special Paper for Laboratory Analysis



THESE papers have been carefully tested by various chemists and their efficiency demonstrated.

Carefully fabricated of exact weight, and washed with hydrochloric and fluorhydric acids, they are chemically pure and the weight of their ash reduced to the greatest possible degree.

Supplied either washed or unwashed with acids.

*Send for descriptive booklet of Prat-Dumas Line
together with Price List*

SOLE AGENTS
E.FOUGERA & CO., INC.
90 BEEKMAN ST., NEW YORK
INSIST ON THE GENUINE

